ATTACHMENT 1

Forward To: EJ ☐ EPCRA / RMP / TSCA ☒ CWA ☐ Wetlands ☐ UIC ☐ PWS ☐ CAA / CFC ☐ RCRA ☐ UST ☐ SPCC ☐

REGION VII MULTIMEDIA SCREENING CHECKLIST

Facility Name: MGPI PROCESSING, INC
Facility Ownership: _____
Street: 1300 MAIN ST
City: ATHLISON State: KS Zip: 66002
Phone: 913-360-5460 Facility Contact: ~~MONIM~~ HOSSAIN DREW. KUCHIARSKI
Number of Employees: 145 Work Hours/Shifts 24/7 Facility Subject to OSHA regulations Yes ☒ No ☐

Inspector PAUL BEATTY
Primary Media: AIR
Inspector Phone Ext.: 7023
Date: 3-15-2016
SIC/NAICS Code 2085 / 312140

Main facility activity, major process chemical(s) & description: ETHANOL (FUEL & BEVERAGE), GLUTEN, STARCH
~~Dry~~ CORN MILL

(**Check all that apply**): painting/coating (water-based ☐, solvent-based ☐), printing ☐, reacting ☐, formulating ☐, distilling ☒, water treatment ☐, refrigeration ☐, manufacturing ☐, parts washers/degreasing (water-based ☐, halogenated-based ☐, non-halogenated-based ☐), combustion (boiler, furnaces, oxidizers) ☒ plating (chrome ☐, other_____).

ENVIRONMENTAL JUSTICE (Note: Forward to EJ if a concern is identified during your inspection)

1. Is the facility located in an apparent low income area (e.g., with many abandoned and dilapidated properties)? No ☒ (stop) Yes ☐
   If yes, is facility less then 1000 feet from nearest routinely occupied property (house, school, etc.)? No ☐ (stop) Yes ☐ *Forward to EJ*

EMERGENCY PLANNING & COMMUNITY RIGHT TO KNOW ACT (EPCRA) & TOXIC SUBSTANCE CONTROL ACT (TSCA)

1. Did facility file a Tier II report with fire department, Local & State Emergency Planning Committee? Yes ☒ No ☐ *Forward to EPCRA*
2. Did facility manufacture, import, or process (formulate, blend, package) >25,000 lbs of a chemical or >100 lbs of a Persistent Bioaccumulative Toxin (lead, mercury, or polycyclic aromatic compounds) at any time over the last 5 years? No ☐ (stop) Yes ☒ *Forward to EPCRA*
3. Has the facility: *If any box in question 3 is marked - Forward to EPCRA* (R)
   a. Stored ≥500 lbs of ammonia ☐, ≥100 lbs of chlorine ☐, or ≥10,000 lbs of an industrial chemical ☒, at any time over the last 2 years? ☒
   b. Stored ≥10,000 lbs of pressurized flammable material (propane, methane, butane, pentane, etc.) at any time over the last 2 years? ☐
   c. Used ≥10,000 lbs of ammonia ☒, chlorine ☐, halogenated solvents ☐, solvent-based paints ☐, or solvents ☐, or nitrated compound, over the last calendar year? ☒
   d. Generated ≥ one half pound of metal dusts, fumes, or metal turnings, over the last calendar year? ☐
4. Does the facility have any oil filled electrical equipment No ☒ (stop) Yes ☐ *Forward to TSCA and ask* Has facility tested oil filled equipment to determine PCB content; No ☐ Yes ☐ number containing PCBs greater than 50 ppm _____ and percent of all equipment tested _____. Is equipment leaking (including wet or weeping equipment)? No ☐ Yes ☐ – *Get Photo*

CLEAN WATER ACT (CWA) - National Pollution Discharge Elimination System (NPDES), Industrial Pretreatment, Storm Water, & Wetlands

1. Does the facility discharge any wastewater to storm sewers, surface water, or the land? No ☐ (stop) Yes ☒
   If yes, are all wastewater discharges permitted? Yes ☒ No ☐ *Forward to CWA*
2. Does the facility have process wastewaters that are discharged to a city POTW (Publicly Owned Treatment Works)? No ☐ (stop) Yes ☒
   If yes, are the discharges permitted by: State? ☐, City? ☒ – If yes, Stop here. No ☐ *Forward to CWA*
   If yes, does the city have a state or EPA approved pretreatment program? Yes ☒ No or Don't Know ☐ *Forward to CWA*
3. During rainfall events, can storm water carry pollutants from manufacturing, processing, storage, disposal, shipping and receiving areas, or from construction sites >1 acre, to storm sewers or surface water? No ☐ (stop) Yes ☒
   If yes, does the facility have an NPDES permit for these storm water discharges? Yes ☒ No ☐ *Forward to CWA*
4. Did you see any wastewater discharges not identified by the facility? No ☒ (stop) Yes ☐ - Identify location, time, appearance of discharge: _____ (*Get Photo*) *Forward to CWA*
5. Does the facility have any wetland areas (e.g. streams, ponds, or temporarily wet areas)? No ☒ (stop) Yes ☐
   If yes, have any wetland areas been dredged, filled, channelized, dammed, or had gravel removed from them within the last 5 years?
   No ☐ (stop) Yes ☐ - Identify location and timeframe_____ (*Get Photo*) *FWD to Wetlands*

SAFE DRINKING WATER ACT (SDWA) - Underground Injection Control (UIC) & Public Water System (PWS)

1. Does facility discharge any liquids to the subsurface (septic systems, disposal wells, cesspools, etc.)? No ☒ (stop) Yes ☐ *Forward to UIC*
   If yes, do these liquid wastes consist of sanitary wastewater only? Yes ☐ No ☐
2. Does facility provide drinking water to 25 people or more from its own source (private well, pond, etc)? No ☒ (stop) Yes ☐ *Forward to PWS*
   If yes, does the facility test or monitor its drinking water in order to comply with state regulations? Yes ☐ No ☐

CLEAN AIR ACT (CAA) and CFCs

1. Do you see any dense, non-steam, smoke or dust emissions leaving the facility property? No ☒ Yes ☐ *Forward to CAA*
   Source_____ *(Get Photo)*
2. Does the facility have any new air pollution emitting equipment that was constructed or installed in the past 5 years? No ☐ (stop) Yes ☒
   If yes, is equipment permitted? Yes ☒ No ☐ *Forward to CAA Describe:* SEE REPORT
3. Does the facility have any cooling units that contain >50 lbs of refrigerant? No ☒ (stop) Yes ☐ *Forward to CFC*
   If yes, are these units: Self-serviced? ☐ Contract Serviced? ☐ - Service Company:_____
4. Does the facility have a refrigeration process that contains more than 10,000 lbs of ammonia ? No ☒ (stop) Yes ☐ *Forward to EPCRA/RMP*
5. Does the facility service motor vehicle air conditioning systems? No ☒ (stop) Yes ☐ *Forward to CFC*

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) and UNDERGROUND STORAGE TANKS (UST)

SQG

1. Does the facility generate more than 30-gallons (220 lbs./100kg) of hazardous waste per month or at any one time? No ☐ (stop) Yes ☒
   If yes, does facility have an EPA Hazardous Waste Identification Number? Yes ☒ (stop) No ☐ *Forward to RCRA*
2. Is hazardous waste treated ☐ , stored >90-days ☐, burned ☐ , land filled ☐ , put in surface impoundments ☐ or waste piles ☐ ?
   No ☒ (stop) Yes ☐ If yes, is the facility permitted for above described activity? Yes ☐ No ☐ *Forward to RCRA*
3. Did you see or does the facility have any large quantities of materials **that the facility claims to be non-hazardous waste material** (>10 drums, roll-offs, waste piles, etc. – exclude clean office trash, cardboard, & packaging type wastes)? No ☒ (stop) Yes ☐

Material Claimed To Be Non-Hazardous	How does the facility know these wastes are non-hazardous?
_____	Testing, industry or manuf. info.., MSDS, etc. ☐ ; None available ☐ *Forward to RCRA*
_____	Testing, industry or manuf. info.., MSDS, etc. ☐ ; None available ☐ *Forward to RCRA*
_____	Testing, industry or manuf. info.., MSDS, etc. ☐ ; None available ☐ *Forward to RCRA*
_____	Testing, industry or manuf. info.., MSDS, etc. ☐ ; None available ☐ *Forward to RCRA*
_____	Testing, industry or manuf. info.., MSDS, etc. ☐ ; None available ☐ *Forward to RCRA*

4. Did you see any leaking hazardous waste containers, drums, or tanks? No ☒ Yes ☐ *Forward to RCRA*
   Describe:_____ *(Get Photo)*
5. Did you see any signs of spills or releases (e.g., dead or stressed vegetation, stains, discoloration)? No ☒ Yes ☐ *Forward to RCRA*
   Describe:_____ *(Get Photo)*
6. Did you see any chemical or waste handling practices that concern you (access to children/public)? No ☒ Yes ☐ *Forward to RCRA &* **EPCRA** Describe:_____ *(Get Photo)*
7. Does the facility have any past or present underground petroleum product or hazardous material tanks? No ☒ Yes ☐ *Forward to UST*
8. Does the facility have any underground fuel tanks for emergency generators? No ☒ Yes ☐ *Forward to UST*

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)

1. Does the facility have any aboveground oil tanks (petroleum, synthetic, animal, fish, vegetable), with an aggregate volume >1,320 gallons?
   No ☐ (stop) Yes ☐ - Does the facility have a certified SPCC Plan? Yes ☒ No ☐ *Forward to SPCC*
   If yes, are there secondary containment systems for the tanks? Yes ☒ No ☐ *Forward to SPCC*
   If yes, are any tanks leaking where oil could reach waters of the State or U.S.? No ☒ Yes ☐ *(Get Photo) Forward to SPCC*

ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

1. Does your facility have an EMS? No ☐ Yes ☒
2. Is the facility's EMS ISO 14001 certified? No ☐ Yes ☒

** PLEASE TAKE PHOTOS TO DOCUMENT POTENTIAL PROBLEMS*

ATTACHMENT 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CONFIDENTIALITY NOTICE

Facility Name: MGPI PROCESSING, INC	
Facility Address: 1300 MAIN ST, ATCHISON, KS 66002	
Inspector (print): PAUL BEATTY	
U.S. EPA, Region 7, 11201 Renner Blvd., Lenexa, KS 66219	Date 3-15-2016

The United States Environmental Protection Agency (EPA) is obligated, under the Freedom of Information Act, to release information collected during inspections to persons who submit requests for that information. The Freedom of Information Act does, however, have provisions that allow EPA to withhold certain confidential business information from public disclosure. To claim protection for information gathered during this inspection you must request that the information be held CONFIDENTIAL and substantiate your claim in writing by demonstrating that the information meets the requirements in 40 CFR2, Subpart B. The following criteria in Subpart B must be met:

1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

2. No statute specifically requires disclosure of the information.

3. Disclosure of the information would cause substantial harm to your company's competitive position.

Information that you claim confidential will be held as such pending a determination of applicability by EPA.

I have received this Notice and DO NOT want to make a claim of confidentiality at this time.	
Facility Representative Provided Notice (print)	Signature/Date
X MUNIM HUSSAIN	Md. Munim Hussain 03/15/16

I have received this Notice and DO want to make a claim of confidentiality.	
Facility Representative Provided Notice (print)	Signature/Date

Information for which confidential treatment is requested:

NONE

(Rev: 7/1/14) White Original / EPA • Yellow / Facility

ATTACHMENT 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RECEIPT FOR DOCUMENTS AND SAMPLES

Facility Name
MGPI PROCESSING, INC
Facility Address
1300 MAIN ST, ATCHISON, KS 66002

Documents Collected? YES X (list below) NO _____

Samples Collected? YES _____ (list below) NO X Split Samples: YES _____ NO _____

Documents/ Samples were: 1) Received no charge X 2) Borrowed _____ 3) Purchased_____

Amount Paid: $_____ Method: Cash _____ Voucher _____ To Be Billed _____

The documents and samples described below were collected in connection with the administration and enforcement of the applicable statute under which the information is obtained.

Receipt for the document(s) and/or sample(s) described below is hereby acknowledged:

(1) SCRUBBER TEST SUMMARY, 6 PAGES,
(2) LDAR MONITORING FORM, 2 PAGES
(3) FUSIL OIL ANALYSIS, 2 PAGES
(4) TEST REPORT, COMBI, 2 PAGES.
(5) WEEKLY HOUSEKEEPING LOG, 1 PAGES.
(6) DENATURANT PUMP HOURS, 1 PAGE.
(7) INSPECTION LOG, 2 PAGES.
(8) GENERATOR HOURS, 1 PAGE,
(9) LDAR PUMP LOG, 1 PAGE.
(10) VOC/HAP EMISSIONS, 4 PAGES
(11) CEDRI REPORT, 6J, 1 PAGE
(12) WASTE WATER REPORT, 4 PAGES,
(13) VISIBLE EMISSION LOG, 5 PAGES,
(14) GENERATOR SPEC SHEET, 1 PAGE,
(15) DIESEL INVOICE, 1 PAGES,

Facility Representative (print)	Signature/Date
MUNIM HUSSAIN	Md. Munim Hussain 3/15/16
Inspector (print)	Signature/Date
PAUL BEATTY	Paul E Beatty 3-15-2016
U.S. EPA, Region 7, 11201 Renner Blvd., Lenexa, KS 66219	

(Rev: 7/14/14) White Original / EPA • Yellow / Facility

ATTACHMENT 4

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
PROCESS SUMMARY SHEET

Date: 3/ 15 /2016 .
Source Name: MGPI
Source Address: 1300 Main St, Atchison, KS 66002
Telephone #: 913-367-1480
Process: Alcohol, gluten, starch
Participants: See report

Inspector: Paul Beatty .
Time In: 0830 Time Out: 1450 .
Temperature: 60 °F Cloud Cover: 100 %
Direction: N Wind Speed: 10-20 mph
AFS #: 20-005-00002 .
SIC/NAICS: 2085,2046,2869/312140,325193 .

EP#	EMISSION POINT/ SOURCE DESCRIPTION		OPERATING (Y/N), CURRENT RATE	CE-	CONTROL DEVICE	CD CONDITION	V E
IA-P/SRAILDEL	Railcar Raw Material Delivery		Y	N/A	N/A		0
IA-1STARCHDRY	#1 Starch Flash Dryer		Y	1STARCHDRY	Baghouse	Ok	0
IA-1STARCHCON	#1 Starch Flash Dryer Conveyance		Y	N/A	N/A		0
IA-1STARCHACM	#1 Starch Flash Dryer Air Classifying Mill (ACM)		Y	1STARCHACM	Baghouse	Ok	0
IA-4STARCHDRY	#4 Starch Spray Dryer		Y	4STARCHDRY & BGH 3441	Baghouse	Ok	0
IA-4STARCHACM	#4 Starch Spray Dryer ACM		Y	4STARCHACM	Baghouse	Ok	0
EU-WESTTRUCK	West Truck Alcohol Loadout		Y		Sub fill	Ok	0
EU-EASTTRUCK	East Truck Alcohol Loadout		Y		Sub fill	Ok	0
EU-ALRAIL7511	Alcohol Rail Loadout 751 Spot 1		Y	N/A	N/A	-	0
EU-ALRAIL7512	Alcohol Rail Loadout 751 Spot 2		Y	N/A	N/A	-	0
IA-8DRUMDRY	#8 Drum Dryer		Y	N/A	N/A	-	0
IA-9DRUMDRY	#9 Drum Dryer		Y	N/A	N/A	-	0
IA-10DRUMDRY	#10 Drum Dryer		Y	N/A	N/A	-	0
IA-8-9DRUMACM	#8-#9Drum Dryer ACM		Y	8-9DRUMACM	Baghouse	Ok	0
IA-10DRUMACM	#10 Drum Dryer ACM		Y	10DRUMACM	Baghouse	Ok	0
IA-2GLUTENDRY	#2 Gluten Flash Dryer		Y	2GLUTENDRY	Baghouse	Ok	0
IA-2GLUTENCON	#2 Gluten Flash Dryer Conveyance		Y	2GLUTENCON	Baghouse	Ok	0
IA-3GLUTENDRY	#3 Gluten Flash Dryer		Y	3GLUTENDRY	Baghouse	Ok	0
IA-3GLUTENACM	#3 Gluten Flash Dryer ACM		Y	3GLUTENACM	Baghouse	Ok	0
IA-701DRYER	#701 Gluten Spray Dryer		Y	701DRYER	Baghouse	Ok	0
IA-701ACM	#701 Gluten Spray Dryer ACM		Y	701ACM	Baghouse	Ok	0
IA-702DRYER	#702 Gluten Spray Dryer		Y	702DRYER	Baghouse	Ok	0
IA-702CON	#702 Gluten Spray Dryer Conveyance		Y	N/A	N/A	-	0
IA-702VAC	#702 Gluten Spray Dryer		Y	702VAC	Baghouse	Ok	0
IA-702ACM	#702 Gluten Spray Dryer ACM		Y	702ACM	baghouse	Ok	0
IA-702DUMP	#702 Gluten Spray Dryer Dump Station		Y	702DUMPFIL	Fabric Filter	Ok	0
IA-STARCHRX1	Modified Starch Reactor #1		Y	MODSTRXBH, FS1	Fabric Filter, Gas Scrubber	pH(7.5-14)= 10.2 flow(>12gpm)=14	0
IA-STARCHRX2	Modified Starch Reactor #2		Y	MODSTRXBH, FS1	Fabric Filter, Gas Scrubber	"	0
IA-STARCHRX3	Modified Starch Reactor #3		Y	MODSTRXBH, FS1	Fabric Filter, Gas Scrubber	"	0
IA-STARCHRX4	Modified Starch Reactor #4		Y	MODSTRXBH, FS1	Fabric Filter	"	0
IA-702 BULKLOAD	Loading starch or protein into truck, closed pneumatic systems;		vents back to product tank filters	BINVENTS	Fabric Filter	Ok	0
IA-1BULKLOAD	#1 Bulk Loadout		Y	N/A	N/A	-	0
IA-2BULKLOAD	#2 Bulk Loadout		Y	N/A	N/A	-	0
IA-PACKERVAC	Packer Vacuum System		Y	PACKVACBH	Fabric Filter	Ok	0
IA-CLEANSYS	Cleaning System		Y	CLEANSYSBH	Fabric Filter	Ok	0
IA-PALLETVAC	Palletizing Vacuum System		Y	PALLETBH	Fabric Filter	Ok	0
IA-BLENDDUMP	Blending Dump Station		Y	BLENDDUBH	Fabric Filter	Ok	0
IA-FEEDBUILD1	Feed Storage Building		Y	N/A	-	-	0
IA-FEEDBUILD2	Feed Storage Building		Y	N/A	-	-	0
IA-MILHOPPER1	Grd Grain Transfer Hopper #1 at Millhouse		Y	N/A	-	-	0
IA-MILHOPPER2	Grd Grain Transfer Hopper #2 at Millhouse		Y	N/A	-	-	0
EU-RAILFEEDLD	Rail Feed Loadout		Y	N/A	-	-	0
EU-TRUCKFEED	Truck Feed Loadout		Y	N/A	-	-	0
IA-SCALELOAD1	Scale Tanks Loadout #1		Y	N/A	-	-	0

IA-SCALELOAD2	Scale Tanks Loadout #2		Y	N/A	-	-	0
EU-ALRAIL752	Alcohol Rail Loadout 752		Y	N/A	-	-	0
EU-TRRECDIST	Truck Dump - Receiving (Distillery)		Y	DISTRECBH	Fabric Filter	Ok	0
IA-R&DDRYER	Research and Development Dryer		Y	N/A	N/A	-	0
IA-WWTPFLARE	Wastewater Treatment Plant Flare		Y	FLARE	Flare	Ok	0
EU-DC1530	DC 1530 H.Q. Rectifier and Condensers C1531 and C1532 in series with C1533 (Beverage Alcohol)		Y	N/A	-	-	0
EU-DC1550	DC 1550 Demethylizer and Condensers in series - C1552 and C1553 (Beverage Alcohol)		Y	N/A	-	-	0
EU-W1561	W1561 Fusel Oil Decanter		Y	N/A	-	-	0
EU-ADS1571	ADS-1571 & 1572 Mole Sieve Dehydration Units and Condensers in series - C1570 and C1571		Y	N/A	-	-	0
EU-DC1587	DC 1587 Low Proof Gin Still and Condenser C1587 (Beverage Alcohol)		Y	N/A	-	-	0
EU-DC1580	Gin Still DC1580 and Condenser C1580 (Beverage Alcohol)		Y	N/A	-	-	0
EU-DC1581	Gin Still DC1581 and Condenser C1581 (Beverage Alcohol)		Y	N/A	-	-	0
EU-PREFERM	Fermentation Process (Pre-Fermentors Units)		Y	S1402 CAM	Packed Gas Absorption Column	Flow (25gpm)=sp 20! dP (10-12")=	0
EU-CONTFERM	Fermentation Process (Continuous Fermentation Process)		Y	S1480 CAM	Tray-Type Gas Absorption Column	Flow (30gpm)=sp30 dP (30-34")=	0
EU-DC1510	DC 1510 Beer Still and Condensers in series - E1510 (Beer Preheater), C1516 (Beer Still Condenser), and C1517 (Beer Still Vent Condenser) (existing)		Y	S1567 CAM	Gas Scrubber	Flow (6.5gpm)=sp6.5 dP (3-6")=	0
EU-DC1520	DC 1520 Extractive Distillation Column and Condensers C1522A & B in series with C1524 (existing) (Beverage Alcohol)		Y	S1567	Gas Scrubber	"	0
EU-SWISSCOMB1	DDGS DRYER		Y, startup.	Integral to dryer	Integral to dryer	-	0
EU-CENTRATE	Centrifuges and Stillage tanks		Y	S1702	Scrubber	Per last ST. Flow (20)=22 gpm dP=	0
EU-BOILER6	Boiler #6		Y	150 MM Btu, NG	N	-	0
EU-BOILER7	Boiler #7		Y	150 MM Btu, NG	N	-	0
EU-BOILER8	Boiler #8	Db 6J	Y, 62k# steam/hr. NG.	180.5 MM Btu, NG and fusel oil	N	-	0
EU-BACKUP GEN1	Cummins Model Number QSX15-G9, SN 79316999	IIII 6/08	N, total hours=137 Test 1x/wk, 0.5 hr.	755 BHP diesel engine	NA	-	-
EU-GRELEVSO	Grain Elevator, South Leg (Handling & Concrete Storage Bins)		Y	-	-	-	0

TANKS:

TK-1BULKFLOUR	Bulk Flour, 38,899 gal		Y	1BULKBH	Fabric Filter		0
TK-2BULKFLOUR	Bulk Flour, 38,899 gal		Y	2BULKBH	Fabric Filter		0
TK-3BULKFLOUR	Bulk Flour, 38,899 gal		Y	3BULKBH	Fabric Filter		0
TK-4BULKFLOUR	Bulk Flour, 38,899 gal		Y	4BULKBH	Fabric Filter		0
TK-5BULKFLOUR	Bulk Flour, 41,292 gal		Y	5BULKBH	Fabric Filter		0
TK-6BULKFLOUR	Bulk Flour, 41,292 gal		Y	6BULKBH	Fabric Filter		0
TK-7BULKFLOUR	Bulk Flour, 41,292 gal		Y	7BULKBH	Fabric Filter		0
TK-8BULKFLOUR	Bulk Flour, 41,292 gal		Y	8BULKBH	Fabric Filter		0
TK-1-5,7OVERHD	Bulk Flour, 2304 gal		Y	1-5,7OVERBH	Fabric Filter		0
TK-POBULK	Propylene Oxide, 12,000 gal		Y	FS2	Gas Scrubber	20 GPM pH=1.6	0
TK-PODAY	Propylene Oxide, 2000 gal		Y	FS2	Gas Scrubber	"	0
TK-H2SO4	H2SO, 46400 gal		Y	FS4	Gas Scrubber	7.1 gpm pH=7.1	0
TK-ACETICBULK	Acetic Anhydride 7000 gal		Y	FS4	Gas Scrubber	"	0
TK-ACETICDAY	Acetic Anhydride 800 gal		Y	FS4	Gas Scrubber	"	0
TK-1PACKER	Protein/Starch Product 3441 gal		Startup	1PACKERBH	Fabric Filter		
TK-2PACKER	Protein/Starch Product 3441 gal		"	2PACKERBH	Fabric Filter		
TK-3PACKER	Protein/Starch Product 3441 gal		"	3PACKERBH	Fabric Filter		
TK-AM701	Protein/Starch Product 11,221 gal		"	AM701BH	Fabric Filter		
TK-701P/S	Protein/Starch Product 16,083 gal		"	701P/SBH	Fabric Filter		
TK-702P/S	Protein/Starch Product 16,083 gal		"	702P/SBH	Fabric Filter		
TK-703P/S	Protein/Starch Product 16,083 gal		"	703P/SBH	Fabric Filter		
TK-704P/S	Protein/Starch Product 33,812 gal		"	704P/SBH	Fabric Filter		
TK-705P/S	Protein/Starch Product 33,812 gal		"	705P/SBH	Fabric Filter		
TK-706P/S	Protein/Starch Product 33,812 gal		"	706P/SBH	Fabric Filter		
TK-707P/S	Protein/Starch Product 33,812 gal		"	707P/SBH	Fabric Filter		
TK-708P/S	Protein/Starch Product 33,812 gal		"	708P/SBH	Fabric Filter		
TK-4PACKER	Protein/Starch Product 12,343 gal		"	4PACKERBH	Fabric Filter		
TK-3201P/S	Protein/Starch Product 16,083 gal		"	3201P/SBH	Fabric Filter		
TK-3202P/S	Protein/Starch Product 16,083 gal		"	3202P/SBH	Fabric Filter		
TK-3203P/S	Protein/Starch Product 16,083 gal		"	3203P/SBH	Fabric Filter		
TK-3204P/S	Protein/Starch Product 16,083 gal		"	3204P/SBH	Fabric Filter		
TK-3001P/S	Protein/Starch Product 68,000 lbs		"	3001P/SFIL	Fabric Filter		
TK-3002P/S	Protein/Starch Product 68,000 lbs		"	3002P/SFIL	Fabric Filter		
TK-3003P/S	Protein/Starch Product 68,000 lbs		"	3003P/SFIL	Fabric Filter		
TK-3004P/S	Protein/Starch Product 68,000 lbs		"	3004P/SFIL	Fabric Filter		
TK-3005P/S	Protein/Starch Product 68,000 lbs		"	3005P/SFIL	Fabric Filter		
TK-3205P/S	Protein/Starch Product 63,000 lbs		"	3205P/SFIL	Fabric Filter		
TK-3206P/S	Protein/Starch Product 63,000 lbs		"	3206P/SFIL	Fabric Filter		
TK-3207P/S	Protein/Starch Product 63,000 lbs		"	3207P/SFIL	Fabric Filter		
TK-3208P/S	Protein/Starch Product 63,000 lbs		"	3208P/SFIL	Fabric Filter		
TK-3006P/S	Protein/Starch Product 143,000 lbs		"	3006P/SFIL	Fabric Filter		
TK-3007P/S	Protein/Starch Product 143,000 lbs		"	3007P/SFIL	Fabric Filter		
TK-3008P/S	Protein/Starch Product 143,000 lbs		"	3008P/SFIL	Fabric Filter		
TK-3009P/S	Protein/Starch Product 143,000 lbs		"	3009P/SFIL	Fabric Filter		
TK-BIN5G/F	Grain/Feed 187,395 bushels		Y	N/A			0
TK-BIN6G/F	Grain/Feed 187,395 bushels		Y	N/A			0
TK-BIN7G/F	Grain/Feed 187,395 bushels		Y	N/A			0
TK-BIN8G/F	Grain/Feed 118,417 bushels		Y	N/A			0
TK-EASTGROUND	Ground Grain 30,737 bushels		Y	N/A			0
TKWESTGROUND	Ground Grain 30,737 bushels		Y	N/A			0
TK-WHOLEGRAIN	Whole Grain 20,721 bushels		Y	N/A			0
TK-COOKGRAIN	Ground Grain 21,222 gal		Y	N/A			0
TK-COOKERMIX	Cooker Mix 515 gal		Y	N/A			0
TK-T1593	Ethanol, Vac Tank 200 gal		Y	S1567 CAM	Gas Scrubber	"	
TK-T1560	Ethanol 5000 gal		Y	N/A			
TK-T1562	Fusel Oil 1269 gal		Y	N/A			
TK-T1573	Ethanol 200 gal (Beverage Alcohol)		Y	S1567	Gas Scrubber	"	
TK-T1581	Ethanol Blender Tank 1000 gal (Beverage)		Y	N/A	N/A		0
TK-T1582	Ethanol 4000 gal (Beverage Alcohol)-		Y	S1567	Gas Scrubber	"	
TK-T1583	Ethanol 4000 gal (Beverage Alcohol)		Y	S1567	Gas Scrubber	"	
TK-T1586	Ethanol 10,000 gal (Beverage Alcohol)		Y	S1567	Gas Scrubber	"	
TK-T1587	EtOH Blender Tank 2200 gal (Beverage)		Y	N/A			0
TK-T4336	Fusel Oil 8225 gal		Y	N/A			0
TK-T4305	Gasoline (Denaturant) 12,000 gal		Y	N/A			0
TK-T4334	Ethanol 219,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4335	Ethanol 118,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4326	Ethanol 434,000 gal (Beverage Alcohol)		Y	N/A			0

TK-T4327	Ethanol 434,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4328	Ethanol 434,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4329	Ethanol 434,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4333	Ethanol 220,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4330	Ethanol 83,900 gal (Beverage Alcohol)		Y	N/A			0
TK-T4331	Ethanol 83,900 gal (Beverage Alcohol)		Y	N/A			0
TK-T4332	Ethanol 83,900 gal (Beverage Alcohol)		Y	N/A			0
TK-DENATMIX	Denaturant Mix 133 gal		Y	N/A			0
TK-MEOH1	Methyl Alcohol 4516 gal		Y	N/A			0
TK-T4315	Ethanol 11,376 gal (Beverage Alcohol)		Y	N/A			0
TK-T4316	Ethanol 11,376 gal (Beverage Alcohol)		Y	N/A			0
TK-T4317	Ethanol 11,750 gal (Beverage Alcohol)		Y	N/A			0
TK-T4318	Ethanol 11,500 gal (Beverage Alcohol)		Y	N/A			0
TK-T4319	Ethanol 21,300 gal (Beverage Alcohol)		Y	N/A			0
TK-T4320	Ethanol 21,300 gal (Beverage Alcohol)		Y	N/A			0
TK-T4321	Ethanol 11,750 gal (Beverage Alcohol)		Y	N/A			0
TK-T4322	Ethanol 6385 gal (Beverage Alcohol)		Y	N/A			0
TK-WT4201	Ethanol 11,000 gal (Beverage Alcohol)		Y	N/A			0
TK-WT4202	Ethanol 12,000 gal (Beverage Alcohol)		Y	N/A			0
TK-T4131	Ethanol 84,801 gal (Beverage Alcohol)		Y	N/A			0
TK-T4132	Ethanol 47,962 gal (Beverage Alcohol)		Y	N/A			0
TK-T4324	Ethanol 100,000 gal	Kb	Y	S1567	Gas Scrubber	"	0
TK-T4325	Ethanol 100,000 gal	Kb	Y	S1567	Gas Scrubber	"	0
TK-MEOH2	Methyl Alcohol 7050 gal		Y	N/A			0
TK-IPA	Isopropyl Alcohol 320 gal		Y	N/A			0
TK-MIBK	Methyl Isobutyl Ketone 320 gal		Y	N/A			0
TK-TBA	Tertiarybutyl Alcohol 320 gal		Y	N/A			0
FS-001	Valves, pumps, pressure relief valves, connectors, and open-ended lines in VOC service		Y	N/A			0
TK-HCLBULK	HCl 6400 gal		Y	FS3	Gas Scrubber	15.7 gpm pH=8.39	0
TK-HCLDAY	HCl 800 gal		Y	FS3	Gas Scrubber	"	0
TK-NORTHHOLD	Starch 25,000 gal		Y	FS3	Gas Scrubber	"	0
TK-SOUTHHOLD	Starch 25,000 gal		Y	FS3	Gas Scrubber	"	0
TK-15STARCH	Starch 5700 gal		Y	FS3	Gas Scrubber	"	0
TK-16STARCH	Starch 5700 gal		Y	FS3	Gas Scrubber	"	0
TK-17STARCH	Starch 5700 gal		Y	FS3	Gas Scrubber	"	0
TK-EASTHOLD	Starch 25,000 gal		Y	FS3	Gas Scrubber	"	0
T1710	Replaced		-				-
S1702	Slop tank in CENTRATE	12	Y	75k gal			0
---							

xxxxxxxxxxxxxxxx

ATTACHMENT 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EMISSION EVALUATION SHEET

Date: 3/ 15 /2016

Source Name: MGPI Inspector: Paul Beatty

EMISSION POINT/ DESCRIPTION	REG/ PERMIT	EMISSION LIMIT or REQUIREMENT	CURRENT RATE/REQUIRE
		1. Any modifications made since last inspection? 2. Any plan to modify the facility next year? 3. Current production rate? 4. Has the production rate changed? Next year.	1. No. 2. New gin tanks-CP 3. 240k gal/day. 4. Same.
All Visible Emissions	KAR 28-19-650	Periodic monitoring. 1. 20% opacity. (Boilers 6&7, 40%) 2. Qualitative assessment. 1x/MONTH. 3. If exceed > 10 days. Notify KDHE. Method 9. 4. Knowledgeable observer. 5. Records.	1. < 20 % opacity. 2. Yes. 3. NA 4. Yes, Method 9. 5. Yes.
Control Equipment		1. control equipment continuously operated w/ the emission unit. 2. written air pollution control equipment maintenance plan shall be developed, implemented, and maintained. 3. maintain a log of all routine or other maintenance or repairs.	1. Yes. 2. Yes. 3. Yes. SAP.
A. EU-BOILER6 EU-BOILER7		1. natural gas only. 2. NO < 0.04 lb/MMBtu. 3. Conduct performance testing in 3rd quarter every 3 years.	1. Yes. 2. Yes. 3. 2013, next 2016.
B. EU-BOILER8: Boiler #8, 180.5 MMBtulhr, natural gas and fusel oil.	40 CFR 60, Subpart Db.	1. > 100 MMBtu/hr. > 5/19/84. 2. NOx: BACT < 0.04 #/MMBtu. (30 day rolling average). NSPS < 0.2 #/MMBtu. (30 day rolling average). 3. CEMS: NOx. 60.48b(c,d,e,f) . 4. PS 2 for CEMS. Annual RATA. (<20%). RECORDS: 5. Fuel sulfur content. 60.47b(g) & 60.48b(j). 6. Fuel combusted each day. w/ flowmeters. 7. Calculate annual capacity factor for NG. 8. 60.49b(g). Date, NOx hourly & 30- day averages. Operating days, excluded data, "F" factor, exceedances. 9. CEMS: daily drift test, Qtr accuracy assessments. 10. EPA protocol gases, current 11. Semi-annual reports. 12. Excess emission reports. 13. Conduct performance testing in 3rd quarter every 3 years.	1. Yes. 2. 0.036 #/MMBtu (30 day) 3. Yes. 4. Passed RATA.(10.21%, 8/11/15) 5. Yes. 6. Yes. 7. ? 8. Yes. 9. Yes. 10. Yes. 11. Yes. 12. Yes. 13. Yes. 2013, next 2016. CEMS: NOx. 30-day=0.034#/mmBtu. 1 hr: 0.045, hi b/c of low load. Inst: 33.5 ppm Inst: O2=4.79% Cal gas: NOx=71.5ppm(exp1/15/22)
B. EU-BOILER8: Boiler #8, 180.5 MMBtulhr, natural gas and fusel oil.	40 CFR Part 63, Subpart JJJJJJ.	1. Under normal operation, the boiler is defined as a gas fired boiler under 40 CFR Part 63.11237. However, the boiler can fire fusel oil as a supplementary fuel for greater than 48 hours per year. Gas fired boilers are exempt from the requirements of 40 CFR Part 63, Subpart JJJJJJ. 2. The requirements outlined below are applicable to the firing of fusel oil in the event the owner or operator fires fusel oil in the boiler. These requirements are summarized in this permit. 3. Pursuant to 40 CFR 63.11225(g), when the owner or operator switches from firing NG to fusel oil, the owner or operator must provide notice of the date upon which the fuel switch occurred. The notification shall be submitted within 30 days of the change. Pursuant to 40 CFR 63.1121O(h) the owner or operator shall demonstrate compliance with applicable provisions of 40 CFR Part 63, Subpart JJJJJJ. Compliance must be demonstrate within 180 days of change from NG to fusel oil.	Fusil oil= alcohol waste. 1. Fusil oil > 48 hours. Started 6/2015. 2. Energy assessment. Biennial tune-up. 3. Notifications have been submitted in CEDRI. Fusil oil analyzed.
C. EU-TRRECDIST Truck Dump - Receiving (Distillery) (CE-DISTRECBH) south grain unloading systems		1. PM < 0.01 grains/dscf. 2. performance testing 3rd calendar quarter every 3 years. 3. Fugitive Control Program shall be written, implemented. 4. sweep the roads within 48 hours of when fugitive emissions are observed that are caused by car/truck traffic on the roads. 5. perform weekly visual inspections of the roads. 6. document the inspection was performed and corrective actions.	1. 7/13: 4.97E-04 gr/dscf. Next test, 2016. 2. Yes. 3. Yes. 4. Yes? 5. Drew 6. Yes. Att.

D. EU-RAILFEEDLD Rail Feed Loadout EU-TRUCKFEED Truck Feed Loadout		1. deadbox used to reduce the velocity of feed to loadout containers. 2. conduct performance testing in 3rd calendar quarter every 3 years. 3. testing demo of compliance with 20% opacity, Method 9.	1. Yes. 2. due 2016. 3. Yes.
E. Beverage Equipment without Scrubber	40 CFR 60, Subpart VV	1. The distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol [40 CFR 60.480(d)(4)]. 2. log listing products are beverage alcohol [40 CFR 60.486(i)(2)]	NA.
F. EU-DC1587 (beverage), DC 1587 Low Proof Gin Still and Condenser C1587. TK-T1587	40 CFR 60, Subpart VVa	1. The equipment is exempt from 40 CFR 60.482-la through 60.482-lla. because the distillery produces beverage alcohol. 2. records maintained in accordance with 40 CFR 60.486a(i)(l)-(3).	NA
G. Non-beverage equipment without scrubber.	40 CFR 60, Subpart VV	1. This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]	See VV.
H. Beverage equipment with Scrubber Distillation scrubber (CE-S1567)		The distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol [40 CFR 60.480(d)(4)]. Keep log listing products are beverage alcohol [40 CFR 60.486(i)(2)] 1. scrubbers either 95% reduction of VOC or <20 PPM 2. Performance testing on the scrubber in the third calendar quarter. 3. Annual performance test shall be performed for each unit. 4. For each unit which demonstrates successful completion of 3 consecutive annual tests, frequency of testing reduced to 1x/3 yr. 5. Liquid flow rate & dP on scrubber shall be monitored continuously. 6. Scrubbers operated at ranges used during most recent test. 7. Data shall be collected, recorded and maintained.	1. Yes. 2. Yes. 3. Every 3 years.2013->2016 4. Yes. 5. Yes. 6. Yes. 7. Yes.
I. TK-T1573/CE-S1567	40 CFR 60, Subpart VV	1. Liquid flow rate & dP on scrubber shall be monitored continuously. 2. Scrubbers operated at ranges used during most recent test. 3. Data shall be collected, recorded and maintained. 4. scrubber (CE-S1567), either 95% reduction of VOC or <20 PPM 5. Performance testing on the scrubber in the third calendar quarter. 6. Annual performance test shall be performed for each unit. 7. For each unit which demonstrates successful completion of 3 consecutive annual tests, frequency of testing reduced to 1x/3 yr.	1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Every 3 years.2013->2016 7. Yes.
J. TK-T1562 Fusel Oil. TK-T4336 Fusel Oil.	40 CFR 60, Subpart VV	Tank 1562 is process tank w/ Fusel Oil for Boiler# 8. Fusel oil is comparable fuel under 40 CFR 261.38. 40 CFR 261.38(c)(7) requires a written Waste Analysis Plan and sampling of the fusel oil. The Waste Analysis Plan is to be submitted and approved by KDHE.	Yes.
K. TK-T4324/CE-S1567. TK-T4325/CE-S1567.	40 CFR 60, Subpart Kb 40 CFR 60, Subpart VV	1. maintain a closed vent system and control device to reduce inlet VOC emissions by 95 percent or greater. [40 CFR 60.112b(a)(3)] 2. records showing the dimensions and of each tank. 3. maintain records of the occurrence of any SSM. 4. Performance testing on the scrubber in the third calendar quarter. 5. Annual performance test shall be performed for each unit. 6. For each unit which demonstrates successful completion of 3 consecutive annual tests, frequency of testing reduced to 1x/3 yr. 7. Liquid flow rate & dP on scrubber shall be monitored continuously. 8. Scrubbers operated at ranges used during most recent test. 9. Data shall be collected, recorded and maintained.	1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Every 3 years.2013->2016 6. Yes. 7. Yes. 8. Yes. 9. Yes.
L. FS-001 Valves, pumps, pressure relief valves, connectors, open-ended lines in VOC service.	40 CFR 60, Subpart VV	1. This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]	See VV.
M. EU-PREFERM/CE-SV S1402. EU-CONTFERM/CE-SV S1480 EU-CENTRATE/CE-SV S1702		1. scrubbers, either 95% reduction of VOC or <20 PPM 2. Performance testing on the scrubber in the third calendar quarter. 3. Annual performance test shall be performed for each unit. 4. For each unit which demonstrates successful completion of 3 consecutive annual tests, frequency of testing reduced to 1x/3 yr. 5. Liquid flow rate & dP on scrubber shall be monitored continuously. 6. Scrubbers operated at ranges used during most recent test. 7. Data shall be collected, recorded and maintained.	1. Yes. 2. Yes. 3. Every 3 years.2013->2016 4. Yes. 5. Yes. 6. Yes, except 1402 set point was to low. 20gpm should be 25gpm. Will reset. 7. Yes.
N and Y. IA-WWTP FLARE/CE-SV FLARE: Wastewater Treatment Plant Flare		1. continuously operated (except shut down for short periods for maintenance without shutting down the anaerobic system of WWTP. 2. flow rate of the waste process gas to the flare < 8,181,360 actual cubic feet during each consecutive 30 day period. 3. WWTP equipped with flow monitoring device capable of measuring and recording the flow rate of the waste process gas to the flare. 4. flow rate of waste process gas to flare, recorded in written log.	1. Yes. 2. Yes. Daily. ~1.2 mil/30 day. 3. Yes. 4. Yes.

0. IA-STARCHRX1. IA-STARCHRX2. IA-STARCHRX3		1. Air emissions of reactors controlled by scrubber (CE-FS1). 2. pH range of 7.5 to 14.0 & flow > 12 gallons per minute. 3. flow rate & pH of the scrubber solution monitored at all times. 4. low pH alarm & low flow rate alarm shall be functional at all times. 5. flow rate & pH of scrubber solution recorded at least 1x/ hour. 6. low pH alarm & low flow rate alarm tested at least once per month. 7. Records of the test results, necessary repairs or adjustments.	1. Yes. 2. Yes. pH=10.2. 14 gpm. 3. Yes. 4. Yes. 5. Yes. 6. Yes. PM. 7. Yes. SAP.
P. Alcohol denatured with gasoline: TK-T4305. EU-ALRAIL752. EU-WESTTRUCK	40 CFR 60, Subpart VV	1. maintain a written compliance plan, in accordance with 60.486, 2. The plan shall define frequencies of monitoring for various facilities. 3. All rail cars shall be dedicated as non-fuel use only. 4. trucks dedicated to non-fuel use do not need emission control w/documentation showing that trucks are dedicated to non-fuel use, the last load was not fuel or the truck was washed prior to loading. 5. records showing that rail cars are dedicated to non-fuel use. 6. Records showing that trucks are not loaded without washing if the last load was fuel.	1. Yes. 2. Yes. 3. Yes. Records. 4. Yes. Records. 5. Yes. 6. Yes.
Q. Beverage and Industrial Alcohol: EU-EASTTRUCK. EU-ALRAIL7511. EU-ALRAIL7512.	40 CFR 60, Subpart VV	1. This distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol [40 CFR 60.480(d)(4)]. 2. Equipment used to load beverage alcohol is older than 1/5/1981.	NA
R. Denaturant equipment used less than 300 hours per year.	40 CFR 60, Subpart VV	1. 60.480(e), comply with 40 CFR 65 Subpart F. 65.100(c), equipment in service < 300 hr/ year, exempts this equipment from leak detection. 2. comply with the identification requirements of 60.103(b)(6).	1. Yes. 2. Yes.
S. EU-PREFERM EU-DC1510. EU-DC1520. TK-T1593. TK-T1573. TK-T1582. TK-T1583. TK-T1586. TK-T4324. TK-T4325. EU-CONTFERM.		1. scrubbers, either 95% reduction of VOC or <20 PPM 2. 40CFR 64, CAM Plan, Attachment C. 3. CAM Recordkeeping and Reporting with semi-annual report.	1. Yes. 2. See CAM 3. Yes.
T. EU-SWJSSCOMBI, DDGS Dryer		1. VOC from Swiss Combi DDGS Dryer, either -95% or <10 ppm. 2. CO emissions either be reduced by 90% or meet the 100 ppm limit. 3. PM & PM10 < 0.02 grains per dry standard cubic foot (dscf) limit. 4. Low-NO, burners < 0.08 pounds of NO, per mmBtu. 5. Performance testing on the scrubber in the third calendar quarter. 6. Annual performance test shall be performed for each unit. 7. For each unit which demonstrates successful completion of 3 consecutive annual tests, frequency of testing reduced to 1x/3 yr.	1. Yes. 5.6 ppm. 2. Yes. 70.6 ppm. 3. Yes. 0.00075 g/dscf. 4. Yes. 0.021 #/mmBtu. 5. Yes. 6. Annual. 7. NA.
U. TK-HCLBULK.TK-HCLDAY		See control equipment section.	-
V.		See control equipment section.	-
W.		20%	-
X.		See control equipment section.	-
Z. EU-BACKUP GEN1: Cummins 755 BHP diesel fired compression ignition emergency engine	40 CFR 60, IIII	1. Certified engine. 2. Diesel sulfur < 15 ppm. w/ certification. 3. Equipped with non-resettable hour meter. 4. Maintenance and readiness testing < 100 hours per year. 5. REC: Time and reason of operation.	1. Yes. 2. Yes. w/invoice. 3. Yes. 4. 137 hours total. 5. Time, not reason. Will add reason column. No emergency, all maintenance.
AA. Facility wide requirement for limiting VOCs: BB. Facility wide requirement for limiting HAPs:		1. VOC emissions < 99 tons/consecutive 12 month period. 2. VOC emissions shall be calculated using formula in permit. 3. IHAP < 9 tons/12 mo. 4. THAP < 24 tons/12 mo. 5. identify each individual HAP emitted from each process or activity (e.g. Acrolein, Acetaldehyde, Toluene, etc). 6. identify, track, maintain a complete record of each process or activity which emits VOC/HAP and monitor the processes for determining emissions from the process (e.g. hours of operation, MMscf of natural gas fired, gallons of propane fired, gallons of liquid loaded, etc.). 7. maintain a current record of the VOC/HAP emission factors used to calculate the monthly & 12 month rolling sum from each process or activity and total facility-wide. 8. This record shall be updated monthly, no later than the last day of the following month to which the record relates.	1. 81.8 tons/12 mo. 2/16. 2. Yes. 3. 9.6 tons/12 mo. 2/16. 4. 6.6 tons/12 mo. 2/16. Acetaldehyde. 5. Yes. 6. Yes. 7. Yes. 8. Yes.
Equipment leaks. Method 21.	40 CFR 60, Method 21. 40 CFR 60, Subpart VV	1. Meet instrument specifications. +/- 2.5 % of specific leak definition concentration. Response factor < 10. once for tested compound. 2. Cal. DAILY. Calibration gases (zero & cal). Cal gas <10k ppm, methane or n-hexane. 3. Calibration precision < 10%. 4. Cali precision test conducted at 3 mo or at next use. 5. Pumps LL-visual inspection, weekly. RM21-monthly. 6. Leak = valves & conn, 500ppm. Annually. 7. Semiannual report.	1. TVA 1000 B. 2. Yes. Methane, 500ppm. 3. Yes. 4. Yes. 5. Yes. Drew. 6. Yes. Drew. Annually b/c < 2% leakers, by KDHE 7. Yes.

CAM PLAN PREFERM, Pre-Fermenter units. Packed bed scrubber S1402 which is part of EP 181.		1. water flow rate is measured with vortex flow meter. 2. Flow meter range is 4 to 261 gallons per minute. 3. An excursion is flow rate < 90% of average flow rate in the most recently accepted ST. 2013 ST was 25 gpm. 4. installed in water inlet line with a accuracy of ±0.65%. 5. Quarterly quality control checks on scrubber system. 6. Measured continuously. 7. Recorded once every 2 hours. Instantaneous values. 1. pressure drop measured with a differential pressure gauge. 2. pressure range is 0 to 1000 inches water. 3. An excursion is > 115% of the average dP in most recently accepted ST. 2013 ST was 10-12 inches water. 4. dP gauge is minimal accuracy of± 0.055% of reading. 5. Quarterly quality control checks on scrubber system. 6. Measured continuously. 7. Recorded once every 2 hours. Instantaneous values.	1. Yes. 2. Yes. 3. Yes. Setpoint was erroneously 20 gpm. Mr. Hussain said it would be reset ASAP. The average appeared to close to the excursion level of 22.5 gpm. 4. Yes. 5. Yes. PM in SAP. 6. Yes. 7. Yes. 1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Yes. 7. Yes.
CAM PLAN DC1510-Beer Still and Condensers in series, DC1520 Extractive Distillation and Condensers in Series, Mole Sieve Vacuum Drums and selected product tanks packed bed scrubber S1567 which is part of EP 182 and 183.		1. water flow rate is measured with float-type flow meter. 2. Flow meter range is 0.66 to 6.6 gallons per minute. 3. An excursion is flow rate < 90% of average flow rate in the most recently accepted ST. 2013 ST was 6.5 gpm. 4. installed in water inlet line with accuracy of ±2%. 5. Quarterly quality control checks on scrubber system. 6. Measured continuously. 7. Recorded once every 2 hours. Instantaneous values. 1. pressure drop measured with a differential pressure gauge. 2. pressure range is 0 to 1000 inches water. 3. An excursion is > 115% of the average dP in most recently accepted ST. 2013 ST was 10-12 inches water. 4. dP gauge is minimal accuracy of± 0.055% of reading. 5. Quarterly quality control checks on scrubber system. 6. Measured continuously. 7. Recorded once every 2 hours. Instantaneous values.	1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Yes. 7. Yes. 1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Yes. 7. Yes.
CAM PLAN CONTFERM Fermentation Process. Packed bed scrubber S1480 which is part of EP 181.		1. water flow rate is measured with float-type flow meter. 2. Flow meter range is 3.5 to 35 gallons per minute. 3. An excursion is flow rate < 90% of average flow rate in the most recently accepted ST. 2013 ST was 30 gpm. 4. installed in water inlet line with accuracy of ±2%. 5. Quarterly quality control checks on scrubber system. 6. Measured continuously. 7. Recorded once every 2 hours. Instantaneous values. 1. pressure drop measured with a differential pressure gauge. 2. pressure range is 0 to 1000 inches water. 3. An excursion is > 115% of the average dP in most recently accepted ST. 2013 ST was 10-12 inches water. 4. dP gauge is minimal accuracy of± 0.055% of reading. 5. Quarterly quality control checks on scrubber system. 6. Measured daily. 7. Recorded once every 2 hours. Instantaneous values.	1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Yes. 7. Yes. 1. Yes. 2. Yes. 3. Yes. 4. Yes. 5. Yes. 6. Yes. 7. Yes.
EIQ	OP	Due 4/1.	Yes.
Annual Compliance Certification, Semi-annual Monitoring	OP	1. ACC CR-02. Due 7/31. 2. SAM. Due 7/31, 1/31.	Yes. Yes.

ATTACHMENT 6

Bureau of Air
Curtis State Office Building
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Phone: 785-296-1719
Fax: 785-291-3953
lladd@kdheks.gov
www.kdheks.gov/bar

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

AIR EMISSION SOURCE
CLASS I OPERATING PERMIT

Source ID No.: 0050002

Initial Date: July 14, 2004 (Revised November 4, 2005, June 5, 2006 and May 5, 2008)

Renewal Date: June 25, 2015

Expiration Date: June 24, 2020

Source Name: MGPI Processing, Inc.

SIC Code: 2085, Distilled and Blended Liquors
2046, Wet corn milling, includes wheat gluten and starch
2869, Industrial Organic Chemicals

NAICS Code: 312140, Distillers
325193, Ethyl alcohol which includes non-potable alcohol and denatured alcohol manufacturing

Source Location: 1300 Main Street
Atchison, KS 66002-0130

Mailing Address: P.O. Box 130
Atchison, KS 66002-0130

I. Authority

This permit, developed in accordance with the provisions of K.A.R. 28-19-500 et seq., "Operating Permit," meets the requirements of K.A.R. 28-19-510 et seq., Class I Operating Permits and Title V of the federal Clean Air Act.

II. Permit Intent

The purpose of this Class I Air Operating Permit is to identify the emission sources and types of regulated air pollutants emitted from the facility; the emission limitations, standards and requirements applicable to each source; and the monitoring, recordkeeping and reporting requirements applicable to each source as of the effective date of this permit. At the time of permit issuance, a Class I Air Emission Source Operating Permit was required because the facility had the potential to emit over 100 tons of sulfur dioxide (SO_2), over 100 tons of nitrogen oxides (NO_x), over 100 tons of particulate matter less than or equal to 10 microns in diameter (PM_{10}), and over 100 tons of carbon monoxide (CO). The facility has taken a facility-wide federally enforceable limit to maintain Volatile Organic Compounds (VOCs) to less than 99 tons per year and a facility-wide federally enforceable limit to maintain Hazardous Air Pollutants to less than 24 tons per year for combined HAPs and less than 9 tons per year for each individual HAP.

TABLE OF CONTENTS

III. Facility Description

MGPI Processing, Inc. (MGPI) produces alcohol, gluten, and starch from various raw materials such as milo, corn, and wheat flour. Corn and milo are received for the processing and production of alcohol. The grain is stored in any one of 4 grain storage bins. From the bins, the grain is mixed, ground and hydrated, to form a mash. This mash is then cooked and fermented for the production of alcohol. The alcohol is extracted through a series of distillation columns, and later stored, in preparation for shipping. After removing the alcohol, the remaining portion is processed and dried as feed.

Wheat flour is utilized for its abundance of starch and protein (gluten). Flour is received and stored at MGPI's flour tanks and then sent to the starch and gluten processing plant, and hydrated to allow the separation to take place. After the two materials are divided, each goes through a series of processing steps, prior to being dried, stored, packaged and shipped.

Insignificant Emission Sources include maintenance parts washers, cooling towers, a 35,000 gallon corn oil tank, a 500 gallon defatted syrup tank, thin stillage centrifuge, seven (7) 889 gallon protein/starch/ammonia tanks, two (2) 650 gallon protein/starch/ammonia tanks, corn oil liquid truck and railcar loadout, research and development activities, heated makeup tank for cleaning, and space heaters

IV. Emission Source Information

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-P/SRAILDEL	Railcar Raw Material Delivery	SV-P/SRAILDEL	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-1STARCHDRY	#1 Starch Flash Dryer	SV-1STARCHDRY	CE-1STARCHDRY	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-1STARCHCON	#1 Starch Flash Dryer Conveyance	SV-1STARCHCON	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-1STARCHACM	#1 Starch Flash Dryer Air Classifying Mill (ACM)	SV-1STARCHACM	CE-1STARCHACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-4STARCHDRY	#4 Starch Spray Dryer	SV-4STARCHDRY and SV-BGH 3441 (integral baghouse)	CE-4STARCHDRY and CE-BGH 3441	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-4STARCHACM	#4 Starch Spray Dryer ACM	SV-4STARCHACM	CE-4STARCHACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
EU-WESTTRUCK	West Truck Alcohol Loadout	SV-WESTTRUCK	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-EASTTRUCK	East Truck Alcohol Loadout	SV-EASTTRUCK	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-ALRAIL7511	Alcohol Rail Loadout 751 Spot 1	SV-ALRAIL7511	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-ALRAIL7512	Alcohol Rail Loadout 751 Spot 2	SV-ALRAIL7512	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-8DRUMDRY	#8 Drum Dryer	SV-8DRUMDRY	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-9DRUMDRY	#9 Drum Dryer	SV-9DRUMDRY	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-10DRUMDRY	#10 Drum Dryer	SV-10DRUMDRY	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-8-9DRUMACM	#8-#9Drum Dryer ACM	SV-8-9DRUMACM	CE-8-9DRUMACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-10DRUMACM	#10 Drum Dryer ACM	SV-10DRUMACM	CE-10DRUMACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-2GLUTENDRY	#2 Gluten Flash Dryer	SV-2GLUTENDRY	CE-2GLUTENDRY	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-2GLUTENCON	#2 Gluten Flash Dryer Conveyance	SV-2GLUTENCON	CE-2GLUTENCON	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-3GLUTENDRY	#3 Gluten Flash Dryer	SV-3GLUTENDRY	CE-3GLUTENDRY	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-3GLUTENACM	#3 Gluten Flash Dryer ACM	SV-3GLUTENACM	CE-3GLUTENACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-701DRYER	#701 Gluten Spray Dryer	SV-701DRYER	CE-701DRYER	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d) Construction. Approval dated 4/27/1994

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-701ACM	#701 Gluten Spray Dryer ACM	SV-701ACM	CE-701ACM	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d) Construction. Approval dated 4/27/1994
IA-702DRYER	#702 Gluten Spray Dryer	SV-702DRYER	CE-702DRYER	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-702CON	#702 Gluten Spray Dryer Conveyance	SV-702CON	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-702VAC	#702 Gluten Spray Dryer	SV-702VAC	CE-702VAC	Baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-702ACM	#702 Gluten Spray Dryer ACM	SV-702ACM	CE-702ACM	baghouse	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-702DUMP	#702 Gluten Spray Dryer Dump Station	SV-702DUMPFIL	CE-702DUMPFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-STARCHRX1	Modified Starch Reactor #1	SV-FS1	CE-MODSTRXBH, CE-FS1	Fabric Filter, Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d) Construction Permit dated 12/20/1993
IA-STARCHRX2	Modified Starch Reactor #2	.SV-FS1	CE-MODSTRXBH, CE-FS1	Fabric Filter, Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d) Construction Permit dated 12/20/1993

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-STARCHRX3	Modified Starch Reactor #3	SV-FS1	CE-MODSTRXBH, CE-FS1	Fabric Filter, Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d) Construction Permit dated 12/20/1993
IA-STARCHRX4	Modified Starch Reactor #4	SV-MODSTRXBH	CE-MODSTRXBH CE-FS1	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-702 BULKLOAD	Loading starch or protein into truck, closed pneumatic systems; vents back to product tank filters	SV- BINVENTS	CE-BINVENTS	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-1BULKLOAD	#1 Bulk Loadout	SV-1BULKLOAD	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-2BULKLOAD	#2 Bulk Loadout	SV-2BULKLOAD	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-PACKERVAC	Packer Vacuum System	SV-PACKVACBH	CE-PACKVACBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-CLEANSYS	Cleaning System	SV-CLEANSYSBH	CE-CLEANSYSBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-PALLETVAC	Palletizing Vacuum System	SV-PALLETBH	CE-PALLETBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-BLENDDUMP	Blending Dump Station	SV-BLENDDUBH	CE-BLENDDUBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
IA-FEEDBUILD1	Feed Storage Building	SV-FEEDBUILD1	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-FEEDBUILD2	Feed Storage Building	SV-FEEDBUILD2	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-MILHOPPER1	Ground Grain Transfer Hopper #1 at Millhouse	SV-MILHOPPER1	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-MILHOPPER2	Ground Grain Transfer Hopper #2 at Millhouse	SV-MILHOPPER2	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
EU-RAILFEEDLD	Rail Feed Loadout	SV-RAILFEEDLD	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012 and 7/13/2012
EU-TRUCKFEED	Truck Feed Loadout	SV-TRUCKFEED	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Response dated 10/8/2007 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
IA-SCALELOAD1	Scale Tanks Loadout #1	SV-SCALELOAD1	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
IA-SCALELOAD2	Scale Tanks Loadout #2	SV-SCALELOAD2	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
EU-ALRAIL752	Alcohol Rail Loadout 752	SV-ALRAIL752	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-TRRECDIST	Truck Dump - Receiving (Distillery)	SV-TRRECDIST	CE-DISTRECBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
IA-R&DDRYER	Research and Development Dryer	SV-R&DDRYER	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
IA-WWTPFLARE	Wastewater Treatment Plant Flare	SV-FLARE	CE-FLARE	Flare	K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3) Construction Permit dated 1/23/2004
EU-DC1530	DC 1530 H.Q. Rectifier and Condensers C1531 and C1532 in series with C1533 (Beverage Alcohol)	SV-DC1530	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-DC1550	DC 1550 Demethylizer and Condensers in series - C1552 and C1553 (Beverage Alcohol)	SV-DC1550	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
EU-W1561	W1561 Fusel Oil Decanter	SV-W1561	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
EU-ADS1571	ADS-1571 & 1572 Mole Sieve Dehydration Units and Condensers in series - C1570 and C1571	SV-ADS1571	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
EU-DC1587	DC 1587 Low Proof Gin Still and Condenser C1587 (Beverage Alcohol)	SV-DC1587	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
EU-DC1580	Gin Still DC1580 and Condenser C1580 (Beverage Alcohol)	SV-DC1580	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
EU-DC1581	Gin Still DC1581 and Condenser C1581 (Beverage Alcohol)	SV-DC1581	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-PREFERM	Fermentation Process (Pre-Fermentors Units)	SV-S1402	CE-S1402	Packed Gas Absorption Column	K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-CONTFERM	Fermentation Process (Continuous Fermentation Process)	SV-S1480	CE-S1480	Tray-Type Gas Absorption Column	K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
EU-DC1510	DC 1510 Beer Still and Condensers in series - E1510 (Beer Preheater), C1516 (Beer Still Condenser), and C1517 (Beer Still Vent Condenser) (existing)	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-DC1520	DC 1520 Extractive Distillation Column and Condensers C1522A & B in series with C1524 (existing) (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Approval 2/3/00 K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-SWISSCOMBI	DDGS DRYER	SV-SWISSCOMBI	Integral to dryer	Integral to dryer	K.A.R. 28-19-650(a)(3) Construction Response dated 10/29/10 Construction Permit dated 4/12/2010, Modified 5/2/2012
EU-CENTRATE	Centrifuges and Stillage tanks	SV-S1702	CE-S1702	Scrubber	Construction Permit dated 4/13/2012 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-BOILER6	Boiler #6 150 MM Btu natural gas	SV-BOILER6&7	N/A	N/A	K.A.R. 28-19-31(a) K.A.R. 28-19-31(b)(1) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
EU-BOILER7	Boiler #7 150 MM Btu natural gas	SV-BOILER6&7	N/A	N/A	K.A.R. 28-19-31(a) K.A.R. 28-19-31(b)(1) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-BOILER8	Boiler #8 180.5 MM Btu natural gas and fusel oil	SV-BOILER8	N/A	N/A	K.A.R. 28-19-31(a) K.A.R. 28-19-31(b)(2) 40 CFR 60 Subpart A 40CFR 60 Subpart Db Construction Permit dated 3/10/1992 40 CFR Part 63 Subpart JJJJJJ Construction permit dated 5/11/2005 U.S.EPA letter dated 1/24/2006 Construction Permit dated 4/12/2010, Modified 5/2/2012 7/13/2012, and 1/24/13
EU-GRELEVSO	Grain Elevator, South Leg (Handling & Concrete Storage Bins)	SV-GRELEVSO	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-1BULKFLOUR	Bulk Flour 38,899 gal	SV-1BULKBH	CE-1BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-2BULKFLOUR	Bulk Flour 38,899 gal	SV-2BULKBH	CE-2BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3BULKFLOUR	Bulk Flour 38,899 gal	SV-3BULKBH	CE-3BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-4BULKFLOUR	Bulk Flour 38,899 gal	SV-4BULKBH	CE-4BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-5BULKFLOUR	Bulk Flour 41,292 gal	SV-5BULKBH	CE-5BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-6BULKFLOUR	Bulk Flour 41,292 gal	SV-6BULKBH	CE-6BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-7BULKFLOUR	Bulk Flour 41,292 gal	SV-7BULKBH	CE-7BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-8BULKFLOUR	Bulk Flour 41,292 gal	SV-8BULKBH	CE-8BULKBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-1-5,7OVERHD	Bulk Flour 2304 gal	SV-1-5,7OVERBH	CE-1-5,7OVERBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-POBULK	Propylene Oxide 12,000 gal	SV-FS2	CE-FS2	Gas Scrubber	K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-PODAY	Propylene Oxide 2000 gal	SV-FS2	CE-FS2	Gas Scrubber	K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-H2SO4	H_2SO_4 6400 gal	SV-FS4	CE-FS4	Gas Scrubber	K.A.R. 28-19-650(a)(3) Construction Permit dated 1/5/2006 K.A.R. 28-19-501(d)
TK-ACETICBULK	Acetic Anhydride 7000 gal	SV-FS4	CE-FS4	Gas Scrubber	K.A.R. 28-19-650(a)(3) Construction Permit dated 1/5/2006 K.A.R. 28-19-501(d)
TK-ACETICDAY	Acetic Anhydride 800 gal	SV-FS4	CE-FS4	Gas Scrubber	K.A.R. 28-19-650(a)(3) Construction Permit dated 1/5/2006 K.A.R. 28-19-501(d)
TK-1PACKER	Protein/Starch Product 3441 gal	SV-1PACKERBH	CE-1PACKERBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-2PACKER	Protein/Starch Product 3441 gal	SV-2PACKERBH	CE-2PACKERBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3PACKER	Protein/Starch Product 3441 gal	SV-3PACKERBH	CE-3PACKERBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-AM701	Protein/Starch Product 11,221 gal	SV-AM701BH	CE-AM701BH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-701P/S	Protein/Starch Product 16,083 gal	SV-701P/SBH	CE-701P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-702P/S	Protein/Starch Product 16,083 gal	SV-702P/SBH	CE-702P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-703P/S	Protein/Starch Product 16,083 gal	SV-703P/SBH	CE-703P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-704P/S	Protein/Starch Product 33,812 gal	SV-704P/SBH	CE-704P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-705P/S	Protein/Starch Product 33,812 gal	SV-705P/SBH	CE-705P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-706P/S	Protein/Starch Product 33,812 gal	SV-706P/SBH	CE-706P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-707P/S	Protein/Starch Product 33,812 gal	SV-707P/SBH	CE-707P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-708P/S	Protein/Starch Product 33,812 gal	SV-708P/SBH	CE-708P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-4PACKER	Protein/Starch Product 12,343 gal	SV-4PACKERBH	CE-4PACKERBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3201P/S	Protein/Starch Product 16,083 gal	SV-3201P/SBH	CE-3201P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3202P/S	Protein/Starch Product 16,083 gal	SV-3202P/SBH	CE-3202P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3203P/S	Protein/Starch Product 16,083 gal	SV-3203P/SBH	CE-3203P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3204P/S	Protein/Starch Product 16,083 gal	SV-3204P/SBH	CE-3204P/SBH	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3001P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	CE-3001P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3002P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	CE-3002P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3003P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	CE-3003P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-3004P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	CE-3004P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3005P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	CE-3005P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3205P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	CE-3205P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3206P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	CE-3206P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3207P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	CE-3207P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3208P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	CE-3208P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3006P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	CE-3006P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3007P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	CE-3007P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-3008P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	CE-3008P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-3009P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	CE-3009P/SFIL	Fabric Filter	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) K.A.R. 28-19-501(d)
TK-BIN5G/F	Grain/Feed 187,395 bushels	SV-BIN5G/F	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-BIN6G/F	Grain/Feed 187,395 bushels	SV-BIN6G/F	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-BIN7G/F	Grain/Feed 187,395 bushels	SV-BIN7G/F	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-BIN8G/F	Grain/Feed 118,417 bushels	SV-BIN8G/F	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-EASTGROUND	Ground Grain 30,737 bushels	SV-EASTGROUND	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-WESTGROUND	Ground Grain 30,737 bushels	SV-WESTGROUND	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-WHOLEGRAIN	Whole Grain 20,721 bushels	SV-WHOLEGRAIN	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-COOKGRAIN	Ground Grain 21,222 gal	SV-COOKGRAIN	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)
TK-COOKERMIX	Cooker Mix 515 gal	SV-COOKERMIX	N/A	N/A	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T1593	Ethanol, Vac Tank 200 gal	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-T1560	Ethanol 5000 gal	SV-T1560	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
TK-T1562	Fusel Oil 1269 gal	SV-T1562	N/A	N/A	K.A.R. 28-19-650(a)(3) Construction Permit dated 4/2/2003
TK-T1573	Ethanol 200 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003 K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T1581	Ethanol Blender Tank 1000 gal (Beverage Alcohol)	SV-T1581	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dated 4/2/2003
TK-T1582	Ethanol 4000 gal (Beverage Alcohol)-	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Permit dared 4/2/2003 K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-T1583	Ethanol 4000 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction. Permit dated 4/2/2003 K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T1586	Ethanol 10,000 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction. Permit dated 4/2/2003 K.A.R. 28-19-501(d) Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-T1587	Ethanol Blender Tank 2200 gal (Beverage Alcohol)	SV-T1587	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VVa Construction Approval dated 6/4/2012
TK-T4336	Fusel Oil 8225 gal	SV-T4336	N/A	N/A	K.A.R. 28-19-650(a)(3)
TK-T4305	Gasoline (Denaturant) 12,000 gal	SV-T4305	N/A	N/A	K.A.R. 28-19-650(a)(3)
TK-T4334	Ethanol 219,000 gal (Beverage Alcohol)	SV-T4334	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4335	Ethanol 118,000 gal (Beverage Alcohol)	SV-T4335	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4326	Ethanol 434,000 gal (Beverage Alcohol)	SV-T4326	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4327	Ethanol 434,000 gal (Beverage Alcohol)	SV-T4327	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T4328	Ethanol 434,000 gal (Beverage Alcohol)	SV-T4328	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4329	Ethanol 434,000 gal (Beverage Alcohol)	SV-T4329	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4333	Ethanol 220,000 gal (Beverage Alcohol)	SV-T4333	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4330	Ethanol 83,900 gal (Beverage Alcohol)	SV-T4330	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Response dated 4/22/2010 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-T4331	Ethanol 83,900 gal (Beverage Alcohol)	SV-T4331	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Response dated 4/22/2010 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T4332	Ethanol 83,900 gal (Beverage Alcohol)	SV-T4332	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV Construction Response dated 4/22/2010 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-DENATMIX	Denaturant Mix 133 gal	SV-DENATMIX	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-MEOH1	Methyl Alcohol 4516 gal	SV-MEOH1	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4315	Ethanol 11,376 gal (Beverage Alcohol)	SV-T4315	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4316	Ethanol 11,376 gal (Beverage Alcohol)	SV-T4316	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4317	Ethanol 11,750 gal (Beverage Alcohol)	SV-T4317	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4318	Ethanol 11,500 gal (Beverage Alcohol)	SV-T4318	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4319	Ethanol 21,300 gal (Beverage Alcohol)	SV-T4319	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T4320	Ethanol 21,300 gal (Beverage Alcohol)	SV-T4320	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4321	Ethanol 11,750 gal (Beverage Alcohol)	SV-T4321	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4322	Ethanol 6385 gal (Beverage Alcohol)	SV-T4322	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-WT4201	Ethanol 11,000 gal (Beverage Alcohol)	SV-WT4201	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-WT4202	Ethanol 12,000 gal (Beverage Alcohol)	SV-WT4202	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4131	Ethanol 84,801 gal (Beverage Alcohol)	SV-T4131	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4132	Ethanol 47,962 gal (Beverage Alcohol)	SV-T4132	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-T4324	Ethanol 100,000 gal	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart Kb K.A.R. 28-19-501(d) Construction Permit dated 4/2/2003 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-T4325	Ethanol 100,000 gal	SV-S1567	CE-S1567	Gas Scrubber	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart Kb K.A.R. 28-19-501(d) Construction Permit dated 4/2/2003 Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015
TK-MEOH2	Methyl Alcohol 7050 gal	SV- MEOH2	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-IPA	Isopropyl Alcohol 320 gal	SV-IPA	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-MIBK	Methyl Isobutyl Ketone 320 gal	SV-MIBK	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
TK-TBA	Tertiarybutyl Alcohol 320 gal	SV-TBA	N/A	N/A	K.A.R. 28-19-650(a)(3) 40 CFR 60 Subpart VV
FS-001	Valves, pumps, pressure relief valves, connectors, and open-ended lines in VOC service	N/A	N/A	N/A	40 CFR 60 Subpart VV
TK-HCLBULK	HCl 6400 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-650(a)(3) Construction Permit 12/20/93 K.A.R. 28-19-501(d)

Emission Source ID	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-HCLDAY	HCl 800 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-650(a)(3) Construction Permit dated 12/20/1993 K.A.R. 28-19-501(d)
TK-NORTHHOLD	Starch 25,000 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-SOUTHHOLD	Starch 25,000 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-15STARCH	Starch 5700 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-16STARCH	Starch 5700 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-17STARCH	Starch 5700 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
TK-EASTHOLD	Starch 25,000 gal	SV-FS3	CE-FS3	Gas Scrubber	K.A.R. 28-19-20 K.A.R. 28-19-501(d) K.A.R. 28-19-650(a)(3)
EU-BACKUP GEN1	Cummins Model Number QSX15-G9, SN 79316999 755 BHP diesel fired compression ignition emergency engine, manufacture date June 2008	SV-	NA	NA	K.A.R. 28-19-650(a)(3) 40 CFR Part 60 Subpart IIII

V. Summary of Applicable Requirements

VI. Applicable Requirements

A. The following emission sources are subject to the requirements listed below:

EU-BOILER6	Boiler #6, 150 MMBtu/hr, natural gas
EU-BOILER7	Boiler #7, 150 MMBtu/hr, natural gas

1. Limitation or Standard

Particulate matter emissions are limited to the amount determined by the following equation:

$$A = \frac{1.026}{I^{0.233}}$$

Where:

A = the allowable emission rate in $lb/10^6$ BTU
I = the total heat input in 10^6 BTU/hr
[K.A.R. 28-19-31(a)]

a. Monitoring

Due to potentially very low or nonexistent emissions, no monitoring is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate (process changes, emission factor increases, fuel changes, etc.), the potential particulate matter emission rate must be recalculated and evaluated against the rule limitation.

b. Recordkeeping and Reporting

No recordkeeping is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate, records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

2. Limitation or Standard

The owner or operator will restrict the fuel fired in the boilers to natural gas only. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

Emissions of NO_x are limited to 0.04 lb/MMBtu heat input and shall be attained through burning only natural gas and performance testing requirements. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on the boilers in the third calendar quarter every three years. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

3. Limitation or Standard

Opacity of visible emissions shall not equal or exceed 40 percent except as provided under K.A.R. 28-19-11. [K.A.R. 28-19-31(b)(1)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

B. **The following emission sources are subject to the requirements listed below:**

EU-BOILER8 Boiler #8, 180.5 MMBtu/hr, natural gas and fusel oil

1. Limitation or Standard

Particulate matter emissions are limited to the amount determined by the following equation:

$$A = \frac{1.026}{I^{0.233}}$$

Where:

A = the allowable emission rate in $lb/10^6$ BTU

I = the total heat input in 10^6 BTU/hr

[K.A.R. 28-19-31(a)]

a. Monitoring

Due to potentially very low or nonexistent emissions, no monitoring is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate (process changes, emission factor increases, fuel changes, etc.), the potential particulate matter emission rate must be recalculated and evaluated against the rule limitation.

b. Recordkeeping and Reporting

No recordkeeping is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate, records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

2. Limitation or Standard

The owner or operator will restrict the fuel fired in the boiler to natural gas only. Fusel oil may be burned as a supplement fuel in quantities up to 1.0 gallons per minute. [Construction Permit dated 5/11/2005 and Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring, Recordkeeping, and Reporting

No monitoring, recordkeeping or reporting is required at the time of the permit issuance.

3. Limitation or Standard

This boiler is subject to the oxides of nitrogen (NO_x) emissions limitation of 0.20 lb/MMBtu or less pursuant to 40 CFR Part 60 Subpart Db. [40 CFR 60.44(b)] The owner or operator shall comply with the applicable requirements 40 CFR Part 60, Subpart A and 40 CFR Part 60, Subpart Db requirements (NSPS Db), as applicable.

Additionally, a NO_x limit of 0.04 pounds per million Btu (lb/MMBtu) heat input shall apply at all times including periods of startup, shutdown, or malfunction. Emissions of NO_x are limited to 0.04 lb/MMBtu heat input and shall be attained through burning only natural gas or fusel oil, Low NO_x burner technology and performance testing requirements. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

The NO_x limitation expressed in the Construction Permit dated 4/12/2010, modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015 is more restrictive than the requirement for NO_x in NSPS Db. Therefore, the NSPS emission limitation for NO_x is subsumed into the NO_x Construction Permit emission limitation for this unit. Recordkeeping, reporting and performance testing requirements applicable to the NSPS NO_x limit still apply.

a. Monitoring

i. For each hour, monitor the boiler load in lb of steam per hour. [Construction Permit dated 3/10/1992]

ii. The owner or operator shall calibrate, maintain, and operate a Continuous Monitoring System (CMS), and record the output of the system, for measuring NOx emissions discharged to the atmosphere according to 40 CFR 60.48b, with the exception that the facility received approval from the U.S. EPA to install a CMS with a NO_x span of 100 ppm. [U.S.EPA letter dated 1/24/2006]

iii. The owner or operator shall conduct performance testing on the boiler in the third calendar quarter every three years.

b. Recordkeeping

i. For each hour, record the boiler load in lb of steam per hour. [Construction Permit dated March 10, 1992 and K.A.R. 28-19-501(c)]

ii. The CMS shall be operated and data recorded during all periods of operation of the boiler except for CMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]

iii. The owner or operator shall maintain records of the information for each steam generating unit operating day as specified in 40 CFR 60.49b(g).

c. Reporting

i. The owner or operator shall submit reports to KDHE containing the information for each steam generating unit operating day as specified in 40 CFR 60.49b(i).

ii. The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

4. Limitation or Standard

Emissions of total suspended particulate (TSP) are limited to 0.005 lb per million Btu heat input.

Emissions of sulfur dioxide (SO_2) are limited to 0.005 lb per million Btu heat input.

Emissions of carbon monoxide (CO) are limited to 0.2 lb per million Btu heat input.

These limitations are based on a one hour averaging time. [Construction Permit dated March 10, 1992]

a. Monitoring

Due to potentially very low or nonexistent TSP, SO2, and CO emissions, no monitoring is required.

b. Recordkeeping and Reporting

No recordkeeping of TSP, SO_2, and CO emissions are required at the time of permit issuance. If, however, any factors change that would affect the potential TSP, SO_2, or CO emission rate, records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

5. Limitation or Standard

The owner or operator shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ. Under normal operation, the boiler is defined as a gas fired boiler under 40 CFR Part 63.11237. However, the boiler can fire fusel oil as a supplementary fuel for greater than 48 hours per year. Gas fired boilers are exempt from the requirements of 40 CFR Part 63, Subpart JJJJJJ.

The requirements outlined below are applicable to the firing of fusel oil in the event the owner or operator fires fusel oil in the boiler. These requirements are summarized in this permit. If a conflict exists between the federal rule and what is summarized in **Section VI.B.5.** of this permit, the requirements of the federal rule shall take precedence.

a. Monitoring

i. Pursuant to 40 CFR 63.11225(g), when the owner or operator switches from firing natural gas to fusel oil, the owner or operator must provide notice of the date upon which the fuel switch occurred. The notification shall be submitted within 30 days of the change.

ii. Pursuant to 40 CFR 63.11210(h) the owner or operator shall demonstrate compliance with applicable provisions of 40 CFR Part 63, Subpart JJJJJJ. Compliance must be demonstrated within 180 days of the change from natural gas to fusel oil.

iii. When the fuel switch is from fusel oil to natural gas the owner or operator must provide notice of the date upon which the fuel switch occurred. The notification shall be submitted within 30 days of the change.

iv. When boiler did not meet the definition of "gas-fired boiler" during the calendar year (e.g., fusel oil was burned for more than 48 hours in the year for testing or fusel oil was burned for cost reasons during the year), the boiler must continue to comply with all applicable requirements 40 CFR Part 63, Subpart JJJJJJ until the end of the current calendar year in which the fusel oil was burned (i.e., December 31). To qualify as a "gas-fired boiler," the boiler must meet the definition of "gas-fired boiler" beginning on January 1 of the next calendar year. Notification of the fuel switch at the end of the calendar year would be required within 30 days of the fuel switch (i.e., 30 days after January 1) as specified in 40 CFR 63.11225(g)

v. Pursuant to 40 CFR 63.11196(a)(1), when firing fusel oil, the owner or operator shall demonstrate compliance with the work practice or management standard for the boiler. The work practices required to demonstrate compliance are as follows:

vi. The owner or operator must conduct a tune-up of the boiler biennially to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. [40 CFR 63.11123(b)]

vii. The biennial tune-up will be conducted as specified below:

(a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The owner or operator may delay the burner inspection until the next scheduled unit shutdown, but the owner or operator must inspect each burner at least once every 36 months.

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

(d) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

(e) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

(f) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

viii. The owner or operator shall demonstrate compliance with the energy assessment requirement for the boiler no later than March 21, 2014. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements satisfies the energy assessment requirement. [40 CFR 63.11201(b)]

ix. As described in ***Table 2 to 40 CFR Part 63, Subpart JJJJJJ—Work Practice Standards, Emission Reduction Measures, and Management Practices***, the owner or operator shall have a one-time energy assessment of the boiler performed by a qualified energy assessor. The energy assessment must include:

(a) A visual inspection of the boiler system,

(b) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,

(c) Inventory of major systems consuming energy from affected boiler and which are under the control of the boiler owner or operator,

(d) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,

(e) A list of major energy conservation measures that are within the facility's control,

(f) A list of the energy savings potential of the energy conservation measures identified, and

(g) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

b. Recordkeeping and Reporting

i. When firing fusel oil, the owner or operator shall comply with the applicable notification, recordkeeping, reporting requirements as described in 40 CFR 63.11225.

(a) An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [63.11225(a)(2)]

(b) If the owner or operator owns or operates an existing or new biomass-fired boiler or an existing or new oil-fired boiler, the owner or operator must submit a signed statement in the Notification of Compliance Status report that indicates that the owner or operator conducted a tune-up of the boiler. [40 CFR 63.11214(b)]

(c) If the owner or operator owns or operates an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, the owner or operator must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of the facility. [40 CFR 63.11214(c)]

(d) The owner or operator must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196 unless you must conduct a performance stack test. The owner or operator must submit the Notification of

Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official. [40 CFR 63.11225(a)(4)]

(i) The owner or operator must submit the information required in 40 CFR 63.9(h)(2), except the information listed in § 63.9(h)(2)(i)(B), (D), (E), and (F). If the owner or operator conducts any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in 40 CFR 63.13.

(ii) This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler."

(iii) This facility has had an energy assessment performed according to 40 CFR 63.11214(c)."

(iv) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.

(e) The owner or operator must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. The owner or operator must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to 40 CFR 63.11223(a) and not subject to emission limits or operating limits, the owner or operator may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section. [40 CFR 63.11225(b)

(i) Company name and address.

(ii) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

1. This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.

2. This facility complies with the requirement in 40 CFR 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

(iii) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(f) The owner or operator must maintain the records specified in paragraphs 63.11225 (c)(1) through (7):

(i) As required in § 63.10(b)(2)(xiv), the owner or operator must keep a copy of each notification and report that was submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted.

(ii) The owner or operator must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 40 CFR 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

1. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

2. For each boiler required to conduct an energy assessment, the owner or operator must keep a copy of the energy assessment report.

(iii) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(iv) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in § 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(g) Records must be in a form suitable and readily available for expeditious review. The owner or operator must keep each record for 5 years following the date of each recorded action. The owner or operator must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The owner or operator may keep the records off site for the remaining 3 years.

ii. The owner or operator shall comply with the applicable provisions of 40 CFR 63.1 through 63.15 as outlined in Table 8 to Subpart JJJJJJ of Part 63. [40 CFR 63.11235]

iii. Maintain onsite and submit, if requested by the Administrator, biennial report containing the information: [40 CFR 63.11123(b)(6)]

(a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.

(b) A description of any corrective actions taken as a part of the tune-up of the boiler.

(c) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

iv. If the owner or operator has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJJ, in the boiler becoming subject to subpart JJJJJJ, or in the boiler switching out of subpart JJJJJJ due to a change to 100 percent natural gas, or the owner or operator has taken a permit limit that resulted in the owner or operator being subject to subpart JJJJJJ, the owner or operator must provide notice of the date upon which the owner or operator switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: [40 CFR 63.11225(g)]

(a) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.

(b) The date upon which the fuel switch, physical change, or permit limit occurred.

6. Limitation or Standard

Opacity of visible emissions shall not equal or exceed 20 percent except as provided under K.A.R. 28-19-11. [K.A.R. 28-19-31(b)(2)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

C. **The following emission source is subject to the requirement listed below:**

EU-TRRECDIST Truck Dump - Receiving (Distillery)

1. Limitation or Standard

The PM control system on the south grain unloading systems (CE-DISTRECBH) shall limit emissions of PM to less than or equal to 0.01 grains/dscf. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on the unloading system in the third calendar quarter every three years. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

b. Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

2. Limitation or Standard

A Fugitive Control Program shall be implemented. The objective of the Fugitive Control Program is to prevent and minimize the release of avoidable fugitive emissions as required. The Program describes the procedure to be used to control emissions, to determine when emissions are at levels requiring corrective action, and to reduce excessive emissions to acceptable levels.

a. Monitoring:

A written program shall be provided including the following actions to minimize fugitive dust emissions:

i. The owner or operator will sweep the roads within 48 hours of when fugitive emissions are observed that are caused by car/truck traffic on the roads.

ii. In the event that sweeping is not possible due to weather conditions; the owner or operator will use water or mechanical means of removal, if possible, to minimize fugitive dust emissions.

iii. The owner or operator will perform weekly visual inspections of the roads.

b. Recordkeeping and Reporting:

The owner or operator will document the inspection was performed and describe any corrective action taken.

D. The following emission sources are subject to the requirements listed below:

EU-RAILFEEDLD	Rail Feed Loadout
EU-TRUCKFEED	Truck Feed Loadout

1. Limitation or Standard

The deadbox shall be used to reduce the velocity of feed to the loadout containers. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on the unloading system in the third calendar quarter every three years. Performance testing for the dead box shall be considered demonstration of compliance with a 20% opacity limit via Method 9.

b. Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

E. The following emission sources are subject to the requirements listed below:

Beverage Equipment without Scrubber

EU-DC1530 (beverage)	DC 1530 H.Q. Rectifier and Condensers C1531 and C1532 in series with C1533
EU-DC1550 (beverage)	DC 1550 Demethylizer and Condensers in series - C1552 and C1553
EU-DC1580 (beverage)	Gin Still DC1580 and Condenser C1580
EU-DC1581 (beverage)	Gin Still DC1581 and Condenser C1581
TK-T1581 (beverage)	Ethanol
TK-T4334 (beverage)	Ethanol
TK-T4327 (beverage)	Ethanol
TK-T4328 (beverage)	Ethanol
TK-T4329 (beverage)	Ethanol
TK-T4333 (beverage)	Ethanol
TK-T4330 (beverage)	Ethanol
TK-T4331 (beverage)	Ethanol
TK-T4332 (beverage)	Ethanol
TK-T4315 (beverage)	Ethanol
TK-T4316 (beverage)	Ethanol
TK-T4317 (beverage)	Ethanol
TK-T4318 (beverage)	Ethanol
TK-T4319 (beverage)	Ethanol
TK-T4320 (beverage)	Ethanol
TK-T4321 (beverage)	Ethanol
TK-T4322 (beverage)	Ethanol

TK-WT4201 (beverage)	Ethanol
TK-WT4202 (beverage)	Ethanol
TK-T4131 (beverage)	Ethanol
TK-T4132 (beverage)	Ethanol

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements. [Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol. [40 CFR 60.480(d)(4)]

a. Monitoring, Recordkeeping, and Reporting

The owner or operator shall record in a log that is kept in a readily accessible location a statement listing the products from the distillery and an analysis demonstrating that the product chemicals are beverage alcohol. [40 CFR 60.486(i)(2)]

F. The following emission sources are subject to the requirements listed below:

EU-DC1587 (beverage)	DC 1587 Low Proof Gin Still and Condenser C1587
TK-T1587	Ethanol 2200 gal (Beverage Alcohol)

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VVa requirements.
[Construction Approval dated 6/4/2012]

The equipment associated with the beverage alcohol tank is exempt from the requirements of 40 CFR Part 60.482–1a through 60.482–11a. Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart. [40 CFR Part 60.480a(d)(1)]

a. Monitoring, Recordkeeping, and Reporting

To demonstrate exemption from the requirements of 40 CFR Part 60.482–1a through 60.482–11a records shall be developed and maintained in accordance with the requirements of 40 CFR Part 60.486a(i)(1)-(3).

2. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

G. The following emission sources are subject to the requirements listed below:

Non-beverage equipment without scrubber

EU-W1561	W1561 Fusel Oil Decanter
EU-ADS1571	ADS-1571 & 1572 Mole Sieve Dehydration Units and Condensers in series - C1570 and C1571
TK-T4335	Ethanol
TK-T4326	Ethanol
TK-T1560	Ethanol

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements.
[Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]

a. Monitoring

Pumps and valves associated with non-beverage alcohol equipment are subject to Leak Detection and Repair (LDAR) requirements. This requirement is met through **Section VI.L** of this permit.

b. Recordkeeping and Reporting

The owner or operator shall keep records of LDAR monitoring and repair as required by 40 CFR Subpart VV. Records shall be submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

H. The following emission sources are subject to the requirements listed below:

Beverage equipment with Scrubber

EU-DC1510 (pre-1981)	DC 1510 Beer Still and Condensers in series - E1510 (Beer Preheater), C1516 (Beer Still Condenser), and C1517 (Beer Still Vent Condenser) (existing)
EU-DC1520 (pre-1981)	DC 1520 Extractive Distillation Column and Condensers C1522A & B in series with C1524 (existing)

TK-T1593 (beverage)	Ethanol
TK-T1582 (beverage)	Ethanol
TK-T1583 (beverage)	Ethanol
TK-T1586 (beverage)	Ethanol

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements.
[Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol. [40 CFR 60.480(d)(4)]

a. Recordkeeping and Reporting

The owner or operator shall record in a log that is kept in a readily accessible location a statement listing the products from the distillery and an analysis demonstrating that the product chemicals are beverage alcohol. [40 CFR 60.486(i)(2)]

2. Limitation or Standard

Distillation scrubber (CE-S1567) is required to provide either 95% reduction of VOC emissions or emissions no higher than 20 PPM, at the option of the owner or operator. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on CE-S1567 in the third calendar quarter.

The owner or operator shall conduct performance testing on the scrubber, as follows:

i. An annual performance test shall be performed for each unit.

ii. For each unit which has demonstrated successful completion of three (3) consecutive annual performance tests, the frequency of testing may be reduced to once during each three (3) year period thereafter, so long as each test is completed successfully and a request to conduct performance testing every three years has been submitted to KDHE.

iii. For any unit which does not complete a performance test successfully, the frequency of testing shall be annually, until three (3) consecutive successful performance tests have again been demonstrated. For the purpose of the permit, a *successful performance test* means a test completed in accordance with a performance test protocol approved by the department, during which all of the emissions limitations required by this permit were met.

iv. Performance testing shall be conducted in accordance with a performance test protocol approved by the department to verify compliance with the emission limitations, conditions and requirements of this permit.

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

3. Limitation or Standard

Liquid flow rate and pressure drop on the scrubber shall be monitored continuously. Scrubbers shall be operated at the ranges used during the most recent emissions test.

a. Monitoring

Data shall be collected, recorded and maintained.

b. Recordkeeping and Reporting

Any deviations of monitoring frequency, recordkeeping or range shall be reported in the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

4. Limitation or Standard

The control equipment (wet scrubber/fabric filter) shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment (wet scrubber/fabric filter) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (wet scrubber/fabric filter), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

I. The following emission sources are subject to the requirements listed below:

TK-T1573/CE-S1567 Ethanol

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements.

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)] [Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

a. Monitoring

Pumps and valves associated with non-beverage alcohol equipment are subject to Leak Detection and Repair (LDAR) requirements. This requirement is met through **Section VLL** of this permit.

b. Recordkeeping and Reporting

The owner or operator shall keep records of LDAR monitoring and repair as required by 40 CFR Subpart VV. Records shall be submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

2. Limitation or Standard

Liquid flow rate and pressure drop on the scrubber shall be monitored continuously. Scrubbers shall be operated at the ranges used during the most recent emissions test.

a. Monitoring

Data shall be collected, recorded and maintained.

b. Recordkeeping and Reporting

Any deviations of monitoring frequency, recordkeeping or range shall be reported in the semi-annual report, report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**..

3. Limitation or Standard

Distillation scrubber (CE-S1567) is required to provide either 95% reduction of VOC emissions or emissions no higher than 20 PPM, at the option of the owner or operator. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on CE-S1567 in the third calendar quarter.

The owner or operator shall conduct performance testing on the scrubber, as follows:

i. An annual performance test shall be performed for each unit.

ii. For each unit which has demonstrated successful completion of three (3) consecutive annual performance tests, the frequency of testing may be reduced to once during each three (3) year period thereafter, so long as each test is completed successfully and a request to conduct performance testing every three years has been submitted to KDHE.

iii. For any unit which does not complete a performance test successfully, the frequency of testing shall be annually, until three (3) consecutive successful performance tests have again been demonstrated. For the purpose of the permit, a *successful performance test* means a test completed in accordance with a performance test protocol approved by the department, during which all of the emissions limitations required by this permit were met.

iv. Performance testing shall be conducted in accordance with a performance test protocol approved by the department to verify compliance with the emission limitations, conditions and requirements of this permit.

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

5. Limitation or Standard

The control equipment shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment, the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

J. The following emission source is subject to the requirements listed below:

TK-T1562	Fusel Oil
TK-T4336	Fusel Oil

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements. [Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]

a. Monitoring

Pumps and valves associated with non-beverage alcohol equipment are subject to Leak Detection and Repair (LDAR) requirements. This requirement is met through **Section VI.L** of this permit.

b. Recordkeeping and Reporting

The owner or operator shall keep records of LDAR monitoring and repair as required by 40 CFR Subpart VV. Records shall be submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

2. Limitation or Standard

Tank 1562 is a process tank containing fusel oil. This tank serves as the fusel oil feed tank when fusel oil is used as a fuel in Boiler # 8. Fusel oil is considered a comparable fuel under 40 CFR 261.38.

a. Monitoring

40 CFR 261.38(c)(7) requires a written Waste Analysis Plan and sampling of the fusel oil. The Waste Analysis Plan is to be submitted and approved by KDHE.

b. Recordkeeping and Reporting

One time notices shall be submitted as specified in 40 CFR 261.38(c)(1).

K. The following emission sources are subject to the requirements listed below:

TK-T4324/CE-S1567	Ethanol
TK-T4325/CE-S1567	Ethanol

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart Kb requirements:

The owner or operator shall install and maintain a closed vent system and control device designed and operated to reduce inlet VOC emissions by 95 percent or greater. [40 CFR 60.112b(a)(3)]

a. Monitoring

i. The owner or operator shall comply with the applicable monitoring requirements of 40 CFR 60.113b(c).

ii. Pumps and valves associated with non-beverage alcohol equipment tanks are subject to Leak Detection and Repair (LDAR) requirements. This requirement is met through **Section VI.L** of this permit.

b. Recordkeeping and Reporting

i. The owner or operator shall keep records of LDAR monitoring and repair as required by 40 CFR Subpart VV. Records shall be submitted with the Semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

ii. The owner or operator shall keep readily accessible records showing the dimensions of the Subpart Kb tanks listed and an analysis showing the capacity of each tank. These records shall be kept for the life of the tanks [40 CFR 60.116b(b)].

iii. In accordance with 40 CFR 60.7(b), the owner or operator shall maintain records of the occurrence of any startup, shutdown, or malfunction in the operation of tanks.

iv. The owner or operator shall keep a copy of the operating plan and a record of the measured values of the parameters monitored in accordance with 60.113b (c) per 40 CFR 60.115b(c).

3. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements:

[Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]

a. Monitoring

Pumps and valves associated with non-beverage alcohol equipment are subject to Leak Detection and Repair (LDAR) requirements. This requirement is met through **Section VI.L** of this permit.

b. Recordkeeping and Reporting

The owner or operator shall keep records of LDAR monitoring and repair as required by 40 CFR Subpart VV. Records shall be submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

3. Limitation or Standard

Liquid flow rate and pressure drop on the scrubber shall be monitored continuously. Scrubbers shall be operated at the ranges used during the most recent emissions test.

a. Monitoring

Data shall be collected, recorded and maintained.

b. Recordkeeping and Reporting

Any deviations of monitoring frequency, recordkeeping or range shall be reported in the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

4. Limitation or Standard

Distillation scrubber (CE-S1567) is required to provide either 95% reduction of VOC emissions or emissions no higher than 20 PPM, at the option of the owner/operator. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

b. Monitoring

The owner or operator shall conduct performance testing on scrubber in the third calendar quarter.

The owner or operator shall demonstrate continuous compliance with this unit by conduct performance testing on the scrubber for this equipment, as follows:

i. An annual performance test shall be performed for each unit.

ii. For each unit which has demonstrated successful completion of three (3) consecutive annual performance tests, the frequency of testing may be reduced to once during each three (3) year period thereafter, so long as each test is completed successfully and a request to conduct performance testing every three years has been submitted to KDHE.

iii. For any unit which does not complete a performance test successfully, the frequency of testing shall be annually, until three (3) consecutive successful performance tests have again been demonstrated. For the purpose of the permit, a *successful performance test* means a test completed in accordance with a performance test protocol approved by the department, during which all of the emissions limitations required by this permit were met.

iv. Performance testing shall be conducted in accordance with a performance test protocol approved by the department to verify compliance with the emission limitations, conditions and requirements of this permit.

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

6. Limitation or Standard

The control equipment shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment (wet scrubber/fabric filter) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (wet scrubber/fabric filter), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

L. The following emission sources are subject to the requirement listed below:

FS-001 Valves, pumps, pressure relief valves, connectors, and open-ended lines in VOC service

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements.

[Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]

a. Recordkeeping and Reporting

The site shall maintain a written compliance plan, in accordance with 60.486, showing the definition of process units and affected facilities. The plan shall define frequencies of monitoring for various facilities. The plan shall specify compliance with repair requirements. Records shall be kept as required by 40 CFR 60 Subpart VV and submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**. Leak repair records shall be kept for 2 years.

M. The following emission sources are subject to the requirements listed below:

EU-PREFERM/CE-SV S1402	Fermentation Process (Pre-Fermentors Units)
EU-CONTFERM/CE-SV S1480	Fermentation Process (Continuous Fermentation Process)
EU-CENTRATE/CE-SV S1702	Centrate scrubber

1. Limitation or Standard

Fermentation scrubbers and Centrate scrubber is required to provide either 95% reduction of VOC emissions or emissions no higher than 20 PPM, at the option of the owner/operator. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance tests on scrubber in the third calendar quarter.

The owner or operator shall demonstrate continuous compliance with this unit by conduct performance testing on the scrubber for this equipment, as follows:

i. An annual performance test shall be performed for each unit beginning in 2011.

ii. For each unit which has demonstrated successful completion of three (3) consecutive annual performance tests, the frequency of testing may be reduced to once during each three (3) year period thereafter, so long as each test is completed successfully and a request to conduct performance testing every three years has been submitted to KDHE.

iii. For any unit which does not complete a performance test successfully, the frequency of testing shall be annually, until three (3) consecutive successful performance tests have again been demonstrated. For the purpose of the permit, a *successful performance test* means a test completed in accordance with a performance test protocol approved by the department, during which all of the emissions limitations required by this permit were met.

iv. Performance testing shall be conducted in accordance with a performance test protocol approved by the department to verify compliance with the emission limitations, conditions and requirements of this permit.

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

2. Limitation or Standard

Liquid flow rate and pressure drop on the scrubbers shall be monitored continuously. Scrubbers shall be operated at the ranges used during the most recent emissions test.

a. Monitoring

Data shall be collected, recorded and maintained.

b. Recordkeeping and Reporting

Any deviations of monitoring frequency, recordkeeping or range shall be reported in the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

3. Limitation or Standard

The control equipment (wet scrubber/fabric filter) shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment (wet scrubber/fabric filter) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (wet scrubber/fabric filter), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

N. The following emission source is subject to the requirements listed below:

IA-WWTP FLARE/CE-SV FLARE Wastewater Treatment Plant Flare

1. Limitation or Standard

The control equipment shall be continuously operated (except as stated below) while operating the emission unit. [K.A.R. 28-19-501(d)(1)]. The flare may be shut down for short periods for maintenance without shutting down the anaerobic system of the wastewater treatment plant.

a. Monitoring

A written air pollution control equipment (flare) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (flare), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

2. Limitation or Standard

The flow rate of the waste process gas directed to the flare shall be no greater than 8,181,360 actual cubic feet during each consecutive 30 day period. [Construction Permit dated January 23, 2004]

a. Monitoring

The wastewater treatment plant is to be equipped with a flow monitoring device capable of measuring and recording the flow rate of the waste process gas to the flare.

b. Recordkeeping and Reporting

The flow rate of the waste process gas directed to the flare shall be recorded in a written log to demonstrate compliance with the flow rate limitation. The written records of the waste process flow rate shall be maintained on-site at the facility for at least 2 years from the date of record.

O. The following emission sources are subject to the requirements listed below:

IA-STARCHRX1	Modified Starch Reactor #1
IA-STARCHRX2	Modified Starch Reactor #2
IA-STARCHRX3	Modified Starch Reactor #3

1. Limitation or Standard

Air emissions of 1, 2 and 3 reactors shall be controlled by the scrubber (CE-FS1) at the pH range of 7.5 to 14.0 and the scrubber flow shall be greater than 12 gallons per minute. [Construction Permit dated December 20, 1993] .

a. Monitoring

The flow rate and pH of the scrubber solution shall be monitored at all times.

The low pH alarm and the low flow rate alarm for the scrubber solution shall be functional at all times.

b. Recordkeeping and Reporting

The flow rate and pH of the scrubber solution shall be recorded at least once per hour and are to be kept available for inspection. These records are to be retained for five years.

The low pH alarm and the low flow rate alarm for the scrubber solution shall be tested at least once per month. Records of the test results, including a description of any necessary repairs or adjustments, shall be retained for inspection for five years.

2. Limitation or Standard

The control equipment (wet scrubber/fabric filter) shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment (wet scrubber/fabric filter) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (wet scrubber/fabric filter), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

3. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight $\leq$ 30 tons/hr
$E = 4.1(P^{0.67})$

for: Process weight > 30 tons/hr
$E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

b. Recordkeeping and Reporting

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

4. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

P. The following emission sources are subject to the requirements listed below:

Alcohol denatured with gasoline

TK-T4305	Gasoline, 12,000 gal
EU-ALRAIL752	Alcohol Rail Loadout 752
EU-WESTTRUCK	West Truck Alcohol Loadout

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements. [Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is not exempt from 40 CFR 60.482 because the distillery produces non-beverage alcohol. [40 CFR 60.480(d)(4)]

a. Recordkeeping and Reporting

The site shall maintain a written compliance plan, in accordance with 60.486, showing the definition of process units and affected facilities. The plan shall define frequencies of monitoring for various facilities. The plan shall specify compliance with repair

requirements. Records shall be kept as required by 40 CFR 60 Subpart VV and submitted with the semi-annual report as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**. Leak repair records shall be kept for 2 years.

2. Limitation or Standard

Fuel, for the purpose of this limitation, is defined as a petroleum based product such as gasoline. Denatured ethanol and pure ethanol are defined as non-fuels. All rail cars shall be dedicated as non-fuel use only. Emissions from trucks dedicated to non-fuel use do not need emission control equipment as long as the owner or operator provides documentation showing that the trucks are dedicated to non-fuel use, the last load was not fuel or the truck was washed prior to loading.

a. Recordkeeping and Reporting

The owner or operator shall keep records showing that rail cars are dedicated to non-fuel use. Records shall be kept showing that trucks are not loaded without washing if the last load was fuel. Records shall be available for KDHE inspection.

Q. The following emission sources are subject to the requirements listed below:

Beverage, and Industrial Alcohol

EU-EASTTRUCK	East Truck Alcohol Loadout
EU-ALRAIL7511	Alcohol Rail Loadout 751 Spot 1 (seldom used with gasoline denaturant)
EU-ALRAIL7512	Alcohol Rail Loadout 751 Spot 2

1. Limitation or Standard

The owner or operator shall comply with 40 CFR Part 60, Subpart A and the following 40 CFR Part 60, Subpart VV requirements: [Construction Approvals dated 2/3/2000, 6/1/2001, and 4/2/2003]

This distillery equipment is exempt from 40 CFR 60.482 because the distillery produces beverage alcohol. [40 CFR 60.480(d)(4)]. Equipment used to load beverage alcohol is older than January 5, 1981.

R. The following emission sources are subject to the requirements listed below:

Denaturant equipment used less than 300 hours per year

TK-MEOH1	Methyl Alcohol Tank
TK-MIBK	Methyl Isobutyl Ketone Tank
TK-DENATMIX	Denaturant Mixtank
TK-IPA	Isopropyl Alcohol Tank
TK-TBA	Tertbutyl Acetate Tank
TK-MEOH2	Methyl Alcohol Tank

1. Limitation or Standard

The owner or operator shall comply with all applicable standards specified in 40 CFR 60, Subpart VV, Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry.

a. Monitoring

In accordance with 60.480(e), this affected facility is chosen to comply with 40 CFR 65 Subpart F. 65.100(c), equipment in service less than 300 hours per year, exempts this equipment from leak detection.

b. Recording Keeping and Reporting

The owner or operator shall comply with the identification requirements of 60.103(b)(6).

S. The following emission sources are subject to the requirement listed below:

EU-PREFERM	Fermentation Process (Pre-Fermentors Units)
EU-DC1510	DC 1510 Beer Still and Condensers in series - E1510 (Beer Preheater), C1516 (Beer Still Condenser), and C1517 (Beer Still Vent Condenser) (existing)
EU-DC1520	DC 1520 Extractive Distillation Column and Condensers C1522A & B in series with C1524 (existing) (Beverage Alcohol)
TK-T1593	Ethanol 200 gal
TK-T1573	Ethanol 200 gal (Beverage Alcohol)
TK-T1582	Ethanol 4000 gal (Beverage Alcohol)
TK-T1583	Ethanol 4000 gal (Beverage Alcohol)
TK-T1586	Ethanol 10,000 gal (Beverage Alcohol)
TK-T4324	Ethanol 100,000 gal
TK-T4325	Ethanol 100,000 gal
EU-CONTFERM	Fermentation Process (Continuous Fermentation Process)

1. Limitation or Standard

The owner or operator shall comply with the requirements of the requiring a 95 percent reduction or ≤ 20 ppm of VOC from the scrubbers controlling emissions from the listed emission units. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

Monitoring shall be performed in compliance with 40 CFR Part 64, Compliance Assurance Monitoring (CAM) found in CAM Plan, **Attachment C** to this permit.

CAM Monitoring shall begin within 30 days of Class I Operating Permit issuance. CAM reporting shall coincide with the reporting periods of this permit.

Alternate monitoring may be established through the development of a revised CAM Plan. Once approved in writing by KDHE, the owner/operator will comply with the new requirements on such date as agreed upon with the KDHE. The newly approved requirements will supersede the monitoring established above. The new monitoring will be incorporated into the permit upon renewal or significant modification to the permit, whichever comes first. See CAM Plan, **Attachment C**.

b. Recordkeeping and Reporting

Records shall be maintained in accordance with the requirements of 40 CFR 64 and the CAM Plan in **Attachment C**. The CAM Plan and any revisions of such plan approved by the KDHE shall be maintained onsite in a form suitable for inspection.

CAM Recordkeeping and Reporting shall begin with the first semi-annual reporting period after permit issuance, and coincide with the reporting periods of this permit as described in **Section XII Testing, Monitoring, Recordkeeping and Reporting Section**.

T. The following emission source is subject to the requirement listed below:

EU-SWISSCOMBI DDGS Dryer

1. Limitations or Standards

The VOC emissions from the Swiss Combi DDGS Dryer shall either be reduced by 95% or meet the 10 ppm limit.

The carbon monoxide (CO) emissions from the Swiss Combi DDGS Dryer shall either be reduced by 90% or meet the 100 ppm limit.

The particulate matter (PM) and PM with an aerodynamic diameter less than or equal to10 micrometers (PM_{10}) emissions from the Swiss Combi DDGS Dryer shall meet the 0.02 grains per dry standard cubic foot (dscf) limit.

The Swiss Combi Dryer shall be equipped with Low-NO_x burners with an emission limit equal to or less than 0.08 pounds of NO_x per million British thermal units (lb/MMBtu).

[Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, 1/24/2013 and 4/1/2015]

a. Monitoring

The owner or operator shall conduct performance testing on scrubber in the third calendar quarter.

The owner or operator shall demonstrate continuous compliance with this unit by conduct performance testing on the scrubber for this equipment, as follows:

i. An annual performance test shall be performed for each unit.

ii. For each unit which has demonstrated successful completion of three (3) consecutive annual performance tests, the frequency of testing may be reduced to once during each three (3) year period thereafter, so long as each test is completed successfully and a request to conduct performance testing every three years has been submitted to KDHE.

iii. For any unit which does not complete a performance test successfully, the frequency of testing shall be annually, until three (3) consecutive successful performance tests have again been demonstrated. For the purpose of the permit, a *successful performance test* means a test completed in accordance with a performance test protocol approved by the department, during which all of the emissions limitations required by this permit were met.

iv. Performance testing shall be conducted in accordance with a performance test protocol approved by the department to verify compliance with the emission limitations, conditions and requirements of this permit.

b. Recordkeeping and Reporting

The owner or operator shall submit the results of all performance tests to KDHE within 30 days of receipt of any test data from performance test contractor. [Construction Permit dated 4/12/2010, Modified 5/2/2012, 7/13/2012, and 1/24/13]

U. The following emission source is subject to the requirement listed below:

TK-HCLBULK	HCl, 6400 gal
TK-HCLDAY	HCl, 800 gal

1. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

2. Limitation or Standard

The control equipment (wet scrubber/fabric filter) shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment (wet scrubber/fabric filter) maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment (wet scrubber/fabric filter), the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

V. **The following emission source is subject to the requirement listed below:**

TK-1BULKFLOUR	Bulk Flour
TK-2BULKFLOUR	Bulk Flour
TK-3BULKFLOUR	Bulk Flour
TK-4BULKFLOUR	Bulk Flour
TK-5BULKFLOUR	Bulk Flour
TK-6BULKFLOUR	Bulk Flour
TK-7BULKFLOUR	Bulk Flour
TK-8BULKFLOUR	Bulk Flour
TK-1-5,7OVERHD	Bulk Flour
TK-1PRODUCT	Protein/Starch Product
TK-2PRODUCT	Protein/Starch Product
TK-3PRODUCT	Protein/Starch Product
TK-4PRODUCT	Protein/Starch Product
TK-5PRODUCT	Protein/Starch Product
TK-6PRODUCT	Protein/Starch Product
TK-7PRODUCT	Protein/Starch Product
TK-8PRODUCT	Protein/Starch Product
TK-1PACKER	Protein/Starch Product
TK-2PACKER	Protein/Starch Product
TK-3PACKER	Protein/Starch Product
TK-AM701	Protein/Starch Product
TK-701P/S	Protein/Starch Product
TK-702P/S	Protein/Starch Product
TK-703P/S	Protein/Starch Product
TK-704P/S	Protein/Starch Product
TK-705P/S	Protein/Starch Product
TK-706P/S	Protein/Starch Product
TK-707P/S	Protein/Starch Product
TK-708P/S	Protein/Starch Product
TK-4PACKER	Protein/Starch Product
TK-3201P/S	Protein/Starch Product
TK-3202P/S	Protein/Starch Product
TK-3203P/S	Protein/Starch Product
TK-3204P/S	Protein/Starch Product
TK-3001P/S	Protein/Starch Product
TK-3002P/S	Protein/Starch Product
TK-3003P/S	Protein/Starch Product
TK-3004P/S	Protein/Starch Product
TK-3005P/S	Protein/Starch Product
TK-3205P/S	Protein/Starch Product
TK-3206P/S	Protein/Starch Product
TK-3207P/S	Protein/Starch Product

TK-3208P/S	Protein/Starch Product
TK-3006P/S	Protein/Starch Product
TK-3007P/S	Protein/Starch Product
TK-3008P/S	Protein/Starch Product
TK-3009P/S	Protein/Starch Product
IA-701ACM	#701 Gluten Spray Dryer Air Classifying Mill
IA-701DRYER	#701 Gluten Spray Dryer
IA-1STARCHDRY	#1 Starch Flash Dryer
IA-1STARCHACM	#1 Starch Flash Dryer Air Classifying Mill
IA-4STARCHDRY	#4 Starch Spray Dryer
IA-4STARCHACM	#4 Starch Spray Dryer ACM
IA-3GLUTENDRY	#3 Gluten Flash Dryer
IA-3GLUTENACM	#3 Gluten Flash Dryer ACM
IA-702DRYER	#702 Gluten Spray Dryer
IA-702ACM	#702 Gluten Spray Dryer ACM
IA-STARCHRX4	Modified Starch Reactor #4
IA-PACKERVAC	Packer Vacuum System
IA-CLEANSYS	Cleaning System
IA-PALLETVAC	Palletizing Vacuum System
IA-BLENDDUMP	Blending Dump Station
TK-NORTHHOLD	Starch 25,000 gal
TK-SOUTHHOLD	Starch 25,000 gal
TK-15STARCH	Starch 5,700 gal
TK-16STARCH	Starch 5,700 gal
TK-17STARCH	Starch 5,700 gal
TK-EASTHOLD	Starch 25,000 gal

1. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight $\leq$ 30 tons/hr
$E = 4.1(P^{0.67})$

for: Process weight > 30 tons/hr
$E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

b. Recordkeeping and Reporting

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

2. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

3. Limitation or Standard

The control equipment shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment, the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

W. The following emission source is subject to the requirement listed below:

IA-RAILFEEDLD	Rail Feed Loadout
IA-TRUCKFEED	Truck Feed Loadout
IA-SCALELOAD1	Scale Tanks Loadout #1
IA-SCALELOAD2	Scale Tanks Loadout #2
EU-TRRECDIST	Truck Dump - Receiving (Distillery)
IA-R&DDRYER	Research and Development Dryer
TK-BIN5G/F	Grain/Feed
TK-BIN6G/F	Grain/Feed

TK-BIN7G/F	Grain/Feed
TK-BIN8G/F	Grain/Feed
TK-WHOLEGRAIN	Grain (Distillery)
IA-5DRUMDRY	#5 Drum Dryer
IA-8DRUMDRY	#8 Drum Dryer
IA-9DRUMDRY	#9 Drum Dryer
IA-10DRUMDRY	#10 Drum Dryer
TK-COOKERMIX	Cooker Mix
IA-P/SRAILDEL	Railcar Raw Material Delivery
TK-BIN5G/F	Grain/Feed
TK-BIN6G/F	Grain/Feed
TK-BIN7G/F	Grain/Feed
TK-BIN8G/F	Grain/Feed
IA-1STARCHCON	#1 Starch Flash Dryer Conveyance
IA-702CON	#702 Gluten Spray Dryer Conveyance
IA-1BULKLOAD	#1 Bulk Loadout
IA-2BULKLOAD	#2 Bulk Loadout
IA-FEEDBUILD1	Feed Storage Building
IA-FEEDBUILD2	Feed Storage Building
IA-MILHOPPER1	Ground Grain Transfer Hopper #1 at Millhouse
IA-MILHOPPER2	Ground Grain Transfer Hopper #2 at Millhouse
TK-EASTGROUND	Ground Grain
TK-WESTGROUND	Ground Grain
TK-COOKGRAIN	Ground Grain
IA-2GLUTENDRY	#2 Gluten Flash Dryer
IA-2GLUTENCON	#2 Gluten Flash Dryer Conveyance

1. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight $\leq$ 30 tons/hr
$E = 4.1(P^{0.67})$

for: Process weight > 30 tons/hr
$E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

b. Recordkeeping and Reporting

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

2. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

X. The following emission sources are subject to the requirement listed below:

TK-HCLBULK	HCl 6400 gal
TK-HCLDAY	HCl 800 gal
TK-POBULK	Propylene Oxide, 12,000 gal
TK-PODAY	Propylene Oxide, 2,000 gal
TK-ACETICBULK	Acetic Anhydride Tank, 7,000 gal
TK-ACETICDAY	Acetic Anhydride Tank. 800 gal
TK-H2SO4	H_2SO_4 Tank

1. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

2. Limitation or Standard

The control equipment shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)]

a. Monitoring

A written air pollution control equipment maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment, the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

Y. The following emission sources are subject to the requirement listed below:

IA-WWTPFLARE Wastewater Treatment Plant Flare

1. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

2. Limitation or Standard

The control equipment shall be continuously operated (except as stated below) while operating the emission unit. [K.A.R. 28-19-501(d)(1)]. The flare may be shut down for short periods for maintenance without shutting down the anaerobic system of the wastewater treatment plant.

a. Monitoring

A written air pollution control equipment maintenance plan shall be developed, implemented, and maintained on-site within 30 days of permit issuance to assure proper operation of the air pollution control equipment. [K.A.R. 28-19-501(d)(2)].

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment, the action taken on such date, and any corrective action or preventive measures taken. [K.A.R. 28-19-501(d)(3)]

3. Limitation or Standard

The flow rate of the waste process gas directed to the flare shall be no greater than 8,181,360 actual cubic feet during each consecutive 30 day period. [Construction Permit dated 1/23/04]

a. Monitoring

The wastewater treatment plant is to be equipped with a flow monitoring device capable of measuring and recording the flow rate of the waste process gas to the flare.

b. Recordkeeping and Reporting

The flow rate of the waste process gas directed to the flare shall be recorded in a written log to demonstrate compliance with the flow rate limitation. The written records of the waste process flow rate shall be maintained on-site at the facility for at least 2 years from the date of record.

4. Limitation or Standard

Operation of the flare shall be exempt from the requirements of K.A.R. 28-19-22(b)(3). [Construction Permit dated 1/23/04]

Z. The following emission source is subject to the requirement listed below:

EU-BACKUP GEN1 Cummins 755 BHP diesel fired compression ignition emergency engine

1. Limitation or Standard

The owner or operator shall comply with the 40 CFR Part 63, Subpart ZZZZ by complying with the applicable requirements of 40 CFR Part 60 Subpart IIII and shall maintain and operator the engine as emergency stationary engine meeting the definitions of 40 CFR 63.6640(f) and 40 CFR 63.6675.

The owner or operator shall comply with the applicable emission standards of 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]

The owner or operator shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40 CFR 60.4207(b)]

a. Monitoring

The owner or operator shall comply with the applicable monitoring requirements of 40 CFR 60.4209.

The owner or operator shall comply with the applicable compliance requirements of 40 CFR 60.4211.

b. Recordkeeping and Reporting

The owner or operator shall comply with the applicable reports and records requirements of 40 CFR 60.4214.

2. Limitation or Standard

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(3)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

AA. The following is a facility wide requirement for limiting VOCs:

1. Limitation or Standard

The facility-wide VOC[1] emissions shall be less than or equal to 99 tons during each consecutive twelve (12) month period. This limit shall include all VOC sources at the facility **(neglecting exempt activities)**. This limit maintains the site's operation as a minor source of VOC facility-wide for the PSD permitting program. The VOC emissions shall be calculated as follows:

$$\sum_{i=1}^{n=12} E_{Total\_VOCs} = \sum[(EF_A \times H_A) + (EF_B \times H_B) + (EF_C \times H_C) + (EF_D \times H_D) + (EF_E \times H_E) + (EF_F \times NG_F) + (EF_G \times FO_G) + (EF_H \times FO_H) + (EF_I \times FO_I) + (EF_{J\,x} \times VOL_{J\,x}) + (EF_{K\,x} \times VOL_{K\,x}) + (E_{TOC}) + (EF_L \times P_L) + (L_L)] \times \left(\frac{1ton}{2000\ lbs}\right)$$

Where:

n = 12; the calculation shall be for 12-month rolling sum, rolled/summed monthly;
i = number of months (e.g., i=1 for the 1st month; i=2 for the sum of 1st and 2nd months);

E_{Total_VOCs} = Emissions of total VOCs from each VOC producing process at the facility, expressed in tons of total VOCs per number of months, i;

EF_A = Emission Factor from most recent successful performance test of EU-PREFERM in pound per hour (lb/hr);
EF_B = Emission Factor from most recent successful performance test of EU-CONTFERM in lb/hr;

1 VOC shall be defined as provided in K.A.R. 28-19-201(b). It is the responsibility of the owner or operator to keep current with respect to revisions made by the department to K.A.R. 28-19-201(b), or superseding provision.

EF_C = Emission Factor from most recent successful performance test of EU-CENTRATE in lb/hr;

EF_D = Emission Factor from most recent successful performance test of EU-DC1510 and EU-DC1520 in lb/hr;

EF_E = Emission Factor from most recent successful performance test of EU-SWISSCOMBI in lb/hr;

EF_F = Emission Factor from AP-42[2] in pounds/Million Standard Cubic Feet (lb/MMscf) for the Combined Million Cubic Feet of Natural Gas Fired for all combustion sources.

EF_G = Emission Factor in pounds per 1,000 Gallons (lb/1,000 g) of Fusel Oil Fired in EU-BOILER8

EF_H = Emission Factor in lb/1,000 g of Fusel Oil Stored in storage tank(s)

EF_I = Emission Factor in lb/1,000 g Fusel Oil Throughput in storage tank(s)

EF_{J_x} = Individual Emission Factors in lb/1,000 g for each Volatile Organic Liquid (VOL[3]) and/or petroleum distillates stored in each storage tank containing a VOC

EF_{K_x} = Individual Emission Factors in lb/1,000 g of each VOL and/or petroleum distillates throughput in each storage tank containing a VOC.

EF_L = Emission Factor from AP-42[4] in pounds/1,000 g for the Propane Fired in IA-WWTPFLARE.

E_{TOC} = Calculations for Equipment Leak Estimates as determined by the following equation[5]:

$$E_{TOC} = F_A \times WF_{TOC} \times N$$

Where:

F_A = Applicable average emission factor for the equipment type (kg/hr/source);

WF_{TOC} = Average weight fraction of TOC in the stream

N = Number of pieces of equipment of the applicable equipment type in the stream

L_L = Calculation for Loading Losses, pounds per 1000 g of liquid loaded as determined by the following equations[6]

$$L_L = [12.46(SPM)/T] \times X$$

Where:
S = Saturation factor
P = True Vapor Pressure of liquid loaded per psia
M = Molecular weight of vapors (pounds per pound mole)
T = Temperature of bulk liquids loaded, °R (°F + 460)
X = Liquid Mole Fraction, calculated as follows:
Where:

$$X = (D \times V/ML)/[(D_{ethanol} \times V_{ethanol}/ML_{ethanol}) + (D_{denaturant} \times V_{denaturant}/ML_{denaturant})]$$

---

2 The owner or operator shall use the most recent edition of US EPA's Compilation of Air Pollutant Emission Factors, AP-42, for natural gas combustion.

3 VOL shall be defined as provided in 40 CFR 51.100. It is the responsibility of the owner or operator to keep current with respect to revisions made to 40 CFR 51.100, or superseding provision.

4 The owner or operator shall use the most recent edition of US EPA's Compilation of Air Pollutant Emission Factors, AP-42, for propane combustion.

5 The owner or operator shall use Table 2-1 SOCMI Average Emission Factors, 1995 Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017 http://www.epa.gov/ttnchie1/efdocs/equiplks.pdf or the most recent EPA approved methods or emission factors for determining equipment leaks emissions.

6 The owner or operator shall use the most recent edition of US EPA's Compilation of Air Pollutant Emission Factors, AP-42, Section 5.2

D = Density
V = Loading rate
ML = Liquid molecular weight

H_A = Hours of operation of EU-PREFERM;
H_B = Hours of operation of EU-CONTFERM;
H_C = Hours of operation of EU-CENTRATE;
H_D = Hours of operation of EU-DC1510 and EU-DC1520;
H_E = Hours of Operation of the EU-SWISSCOMBI
NG_F = The total amount of natural gas fired in all combustion processes in MMscf;
FO_G = The total gallons of Fusel Oil Fired in EU-BOILER8
FO_H = The total gallons of Fusel Oil Stored in storage tank(s)
FO_I = The total gallons of Fusel Oil Throughput in storage tank(s)
VOL_{Jx} = The total gallons of each VOL and/or petroleum distillates stored per each storage tank containing a VOC
VOL_{Kx} = The total gallons of each VOL and/or petroleum distillates (x) throughput per each storage tank containing a VOC.
P_L = The total gallons of propane fired in IA-WWTPFLARE

a. Monitoring

The owner or operator shall identify, track and maintain a complete record of each process or activity which emits VOCs and monitor the processes for determining emissions from the process (e.g. hours of operation, MMscf of natural gas fired, gallons of propane fired, gallons of liquid loaded, etc.). The owner or operator shall maintain a current record of the VOC emission factors used to calculate the monthly and each consecutive twelve (12) month rolling sum from each process or activity and total facility-wide. The record of the calculations shall be maintained for inspection or for submittal upon request to ensure compliance with the calculation methodology.

b. Recordkeeping and Reporting

i. Records shall be maintained demonstrating compliance with the limit of less than or equal to 99 tons of VOC per each consecutive twelve (12) month period. This record shall be updated monthly, no later than the last day of the following month to which the record relates.

ii. If at the end of any twelve (12) month consecutive period the source has operated during that previous twelve (12) month consecutive period at a level exceeding the VOC limitation, the owner or operator shall report in writing the actual operations for that previous twelve (12) month consecutive period within 10 days of discovering the exceedance.

BB. The following is a facility wide requirement for limiting HAPs:

1. Limitation or Standard

The facility-wide emissions of individual HAPs[7] shall not exceed 9 tons for any single HAP. This limit shall include all HAP sources at the facility **(neglecting exempt activities)**. This limit maintains the site's operation as a minor source of HAPs facility-wide for the Title V permitting program and National Emissions Standards for Hazardous Air Pollutant (NESHAP) regulations.

7 A HAP shall be defined as provided in K.A.R. 28-19-201(a). It is the responsibility of the owner or operator to keep current with respect to revisions made by the department to K.A.R. 28-19-201(a), or superseding provision.

a. Monitoring

i. The owner or operator shall identify each individual HAP emitted from each process or activity (e.g. Acrolein, Acetaldehyde, Toluene, etc). For each individual HAP, the owner or operator shall sum the monthly total and each consecutive twelve (12) month total of that individual HAP, as follows:

$$\sum_{i=1}^{n=12} E_{Individual\_HAP} = \sum[(EF_x \times H_A) + (EF_x \times H_B) + (EF_x \times H_C) + (EF_x \times H_D) + (EF_x \times H_E) + (EF_x \times NG_F) + (EF_{Gx} \times HAP_{Gx}) + (EF_{Hx} \times HAP_{Hx}) + (L_L)] \times \left(\frac{1ton}{2000\ lbs}\right)$$

Where:

n = 12; the calculation shall be for 12-month rolling sum, rolled/summed monthly;
i = number of months (e.g., i=1 for the 1st month; i=2 for the sum of 1st and 2nd months);
$E_{Individual\_HAPs}$ = Emissions of individual HAP from each HAP producing process at the facility, expressed in tons of HAP per number of months, i;

EF_x = Emission Factor for each individual HAP (x) (e.g. Acrolein. Formaldehyde, Methanol, and Acetaldehyde, etc.) from most recent successful performance test of EU-PREFERM in pound per hour (lb/hr);
EF_x = Emission Factor for each individual HAP (x) (e.g. Acrolein. Formaldehyde, Methanol, and Acetaldehyde, etc.) from most recent successful performance test of EU-CONTFERM in lb/hr;
EF_x = Emission Factor for each individual HAP (x) (e.g. Acrolein. Formaldehyde, Methanol, and Acetaldehyde, etc.) from most recent successful performance test of EU-CENTRATE in lb/hr;
EF_x = Emission Factor for each individual HAP (x) (e.g. Acrolein. Formaldehyde, Methanol, and Acetaldehyde, etc.) from most recent successful performance test of EU-DC1510 and EU-DC1520 in lb/hr;
EF_x = Emission Factor for each individual HAP (x) (e.g. Acrolein. Formaldehyde, Methanol, and Acetaldehyde, etc.) from most recent successful performance test of EU-SWISSCOMBI in lb/hr;
EF_x = Emission Factor for each individual HAP (x) from AP-42 in pounds/Million Standard Cubic Feet (lb/MMscf) for the Combined Million Cubic Feet of Natural Gas Fired for all combustion sources.
EF_{Gx} = Emission Factor for each individual HAP (x) in lb/1,000 g for each HAP containing material stored (G) in each storage tank.
EF_{Hx} = Emission Factor for each individual HAP (x) in lb/1,000 g for each HAP containing material throughput (H) in each storage tank.

L_L = Calculation for Loading Losses, pounds per 1000 g of liquid loaded as determined by the following equations

$L_L = [12.46(SPM)/T] \times X$

Where:
S = Saturation factor
P = True Vapor Pressure of liquid loaded per psia
M = Molecular weight of vapors (pounds per pound mole)
T = Temperature of bulk liquids loaded, °R (°F + 460)

X = Liquid Mole Fraction, calculated as follows:

Where:

$X = (D \times V/ML)/[(D_{ethanol} \times V_{ethanol}/ML_{ethanol}) + (D_{denaturant} \times V_{denaturant}/ML_{denaturant})]$

D = Density
V = Loading rate
ML = Liquid molecular weight

H_A = Hours of operation of EU-PREFERM;
H_B = Hours of operation of EU-CONTFERM;
H_C = Hours of operation of EU-CENTRATE;
H_D = Hours of operation of EU-DC1510 and EU-DC1520;
H_E = Hours of Operation of the EU-SWISSCOMBI
NG_F = The total amount of natural gas fired in all combustion processes in MMscf;
HAP_{Gx} = The total gallons of each HAP (x) containing material stored per each storage (G) tank
HAP_{Hx} = The total gallons of each HAP (x) containing throughput (H) per each storage tank

2. Limitation or Standard

The facility-wide emissions of combined HAPs shall not exceed 24 tons. This limit shall include all HAP sources at the facility **(neglecting exempt activities)**. This limit maintains the site's operation as a minor source of HAPs facility-wide for the Title V permitting program and NESHAP regulations.

a. Monitoring
From all individual HAPs identified to be emitted from each process or activity that are calculated monthly and each consecutive twelve (12) month period as described in **Section III. P.**, the owner or operator shall sum the monthly total of all combined HAPs, as follows:

$$E_{Total\_HAPs} = \sum_{i=1}^{n=12} E_{Individual\_HAPs}$$

Where:

n = 12; the calculation shall be for 12-month rolling sum, rolled/summed monthly;
i = number of months (e.g., i=1 for the 1st month; i=2 for the sum of 1st and 2nd months);
E_{Total_HAPs} = Emissions of all HAPs from each HAP producing process at the facility, expressed in tons of HAPs
$E_{Individual\_HAPs}$ = Sum of emissions of each individual HAP from each HAP producing process at the facility, expressed in tons of HAP per number of months, i;

b. Recordkeeping and Reporting

i. The owner or operator shall identify, track and maintain a complete record of each process or activity which emits HAPs and monitor the processes for determining emissions from the process (e.g. hours of operation, MMscf of natural gas fired, gallons of propane fired, gallons of liquid loaded, etc.). The owner or operator shall maintain a current record of the HAP emission factors

used to calculate the monthly and each consecutive twelve (12) month rolling sum from each process or activity and total facility-wide. The record of the calculations shall be maintained for inspection or for submittal upon request to ensure compliance with the calculation methodology.

ii. A record shall be maintained demonstrating compliance with the less than 9 tons for any single HAP and less than 24 tons for any combination of HAPs per each consecutive twelve (12) month period. This record shall be updated monthly, no later than 30 days following the last day of the month to which the record relates.

iii. If at the end of any twelve (12) month consecutive period the source has operated during that previous twelve (12) month consecutive period at a level exceeding the single or combined HAPs emission limitations, the owner or operator shall report in writing the actual operations for that previous twelve (12) month consecutive period within 10 days of discovering the exceedance.

CC. **The following is a facility wide requirement:**

Qualitative assessments and other reporting requirements as described in **Section IX. Opacity Limitations and Monitoring** of this permit is required. The facility is required to submit semi-annual reports. Refer to **Section XII Testing, Monitoring, Recordkeeping and Reporting Section** of this permit for the submittal dates of these reports.

VII. Opacity Summary

All emission units other than those listed below are limited to a 20% opacity limit.

Stack/Vent ID	Emission Source ID	Emission Source Opacity Requirement
SV-BOILER6&7	EU-BOILER6	40%[1]
SV-BOILER6&7	EU-BOILER7	40%[1]

VIII. Facility-Wide Applicable Requirements

The permittee shall comply with the following when required by the relevant regulation:

A. **K.A.R. 28-19-30 through K.A.R. 28-19-32, Indirect Heating Equipment Emissions**

Except as provided in K.A.R. 28-19-32, aggregated emissions of particulate matter from indirect heating equipment shall not exceed those specified in table H-1 of K.A.R. 28-19-31(a), or for equipment having intermediate heat input between 10 MMBtu/hr and 10,000 MMBtu/hr, the allowable emission rate may be determined by the equation provided at K.A.R. 28-19-31(a).

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

B. K.A.R. 28-19-55 through K.A.R. 28-19-58, Emergency Episode Plans

The permittee shall comply with the requirements of K.A.R. 28-19-55 through 28-19-58, Emergency Episode Plans, and shall maintain on site an emergency episode plan if the KDHE requires an emergency episode plan be developed pursuant to K.A.R. 28-19-58.

C. K.A.R. 28-19-202, Annual Fee Payment

The owner or operator of a permitted emissions unit or stationary source is required to pay fees to the permitting authority consistent with the fee schedule set out in the regulations pursuant to K.A.R. 28-19-202.

D. K.A.R. 28-19-210, Calculation of Actual Emissions

The following applies to emission control equipment not otherwise addressed in this permit:

If the owner or operator uses air emission control equipment, not otherwise addressed in this permit, to calculate actual emissions, the air emission control equipment shall be maintained in accordance with the manufacturer's recommendation. The owner or operator shall keep a written log recording the date and type of action taken when performing preventive or other maintenance on the air emission control equipment.

E. K.A.R. 28-19-517, Annual Emissions Inventory

The owner or operator shall submit all operating or relevant information to estimate emissions for the preceding year to the KDHE. This information shall be submitted on or before the date specified at K.A.R. 28-19-517 or amendments thereto and shall be submitted on forms provided or approved by the KDHE. At the time of permit issuance, the due date for submittal of this information is April 1.

F. K.A.R. 28-19-645, Open Burning

The permittee is prohibited from conducting open burning, except as allowed by K.A.R. 28-19-647 and K.A.R. 28-19-648.

G. K.A.R. 28-19-735, Which Adopted by Reference 40 CFR Part 61, Subpart A and Subpart M

The permittee shall comply with the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart A, General Provisions, and Subpart M, National Emission Standard for Asbestos, adopted by K.A.R. 28-19-735 and K.A.R. 28-50-1 et seq., when conducting any renovation or demolition activities at the facility.

H. 40 CFR Part 68, Chemical Accident Prevention Provisions

Chemical Accident Prevention Provisions, 40 CFR Part 68, is applicable to an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined in 40 CFR 68.115.

If the stationary source is subject to 40 CFR Part 68, but is not required to comply with those requirements as of the effective date of this operating permit, the stationary source shall be in compliance with the requirements of 40 CFR Part 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance is first listed in 40 CFR 68.130; or
- The date on which a regulated substance is first present above a threshold quantity in a process.

I. 40 CFR Part 82, Protection of Stratospheric Ozone

The permittee shall comply with 40 CFR Part 82, Protection of Stratospheric Ozone. Affected controlled substances include, but are not limited to, chlorofluorocarbons, hydro chlorofluorocarbon refrigerants, halons, carbon tetrachloride, and methyl chloroform (specific affected controlled substances are listed in 40 CFR Part 82, Subpart A, appendices A {Class I} and B {Class II}).

The following subparts and sections of 40 CFR Part 82 are conditions of this permit:

Subpart A - Production and Consumption Controls
Subpart B - Servicing of Motor Vehicle Air Conditioners
Subpart E - Labeling of Products Using Ozone-Depleting Substances: Section; 82.106 Warning statement requirements, 82.108 Placement of warning statement, 82.110 Form of label bearing warning statement, and 82.112 Removal of label bearing warning statement
Subpart F - Recycling and Emissions Reduction: Sections; 82.156 Required practices, 82.158 Standards for recycling and recovery equipment, 82.161 Technician certification, and 82.166 Reporting and recordkeeping requirements
Subpart G - Significant New Alternatives Policy Program

IX. Opacity Limitations and Monitoring

Except as otherwise provided in K.A.R. 28-19-9, K.A.R. 28-19-11, and K.A.R. 28-19-650(c) or as otherwise identified in the Applicable Requirements portion of this permit, K.A.R. 28-19-650(a)(3) limits visible air emissions from each emission unit to 20%. K.A.R. 28-19-31(b)(2) limits visible air emissions from any indirect heating equipment to less than 20%.

Except as otherwise provided in the applicable requirements portion of this permit, emissions from the following or similar activities do not require routine periodic monitoring: emissions vented inside an enclosed building or structure, from cooling towers, and from evaporative VOC sources; and emissions from turbines, reciprocating internal combustion engines, burners in indirect heating applications, and space heaters when burning natural gas, propane/LPG, or refinery gas.

Routine periodic monitoring requirements: Except as otherwise provided in the applicable requirements portion of this permit or as provided above, the owner or operator shall perform a qualitative assessment at least once per calendar month, with at least one week between assessments. The monthly qualitative assessment shall include each activity at the facility, which is operating at the time scheduled. For each activity from which the opacity of visible emissions appears to exceed the limit, the permittee shall take appropriate action to correct process operating parameters, after which the permittee shall perform an additional qualitative assessment for that unit. If, at the end of ten operating days from the date of the possible exceedance, opacity of visible emissions appears to exceed the limit, the owner or operator shall notify the agency. Within seven days of the end of the ten operating day period, a test of visible emissions from the unit shall be scheduled. The test shall occur within 30 days of the end of the ten operating day period and shall utilize EPA Method 9.

The person responsible for making qualitative opacity assessments shall be knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting and wind, and the presence of uncombined water in the plume.[8] The permittee shall keep records of each qualitative assessment, which shall include the time and date of the assessment, a description of the emission point from which any unusual emissions emanated, the steps taken to correct any abnormal emissions, and the name of the person conducting the assessment.

[8] For basic information about opacity observations, refer to 40 CFR Part 60 Appendix A, Method 9.

Additionally, emission units EU-SWISSCOMBI; EU-DC1510, EU-DC1520, TK-T1593, TK-T1573, TK-T1582, TK-T1583, TK-T1586, TK-T4324, TK-T4325 (controlled by CE-S1567); EU-PREFERM (controlled by CE-S1402); EU-CONTFERM (controlled by CE-S1480); EU-CENTRATE (controlled by CE-S1702); EU-BOILER6; EU-BOILER7; EU-BOILER8; and EU-TRRECDIST (controlled by CE-DISTRECBH) have scheduled performance test requirements which include Method 9 testing (See specific requirements under **Section VI** of the permit for details for the testing schedule.)

The KDHE Bureau of Air does not consider a qualitative assessment in which emissions appear to exceed the applicable opacity limits to be a violation or deviation subject to reporting in accordance with Section **XIII. Reporting of Deviations from Permit Terms**. A Method 9 evaluation that shows opacity exceeding the emission limit would be subject to reporting in accordance with Section **XIII. Reporting of Deviations from Permit Terms**.

X. Requirements Which Will Become Applicable During the Permit Term

The owner or operator, in accordance with the provisions of K.A.R. 28-19-511(b)(16)(C)(ii) and K.A.R. 28-19-512(a)(23) shall comply in a timely manner with those applicable requirements that become effective during the permit term, unless a detailed schedule is expressly required by the applicable requirement.

XI. Permit Shield

Compliance with the conditions of this permit shall be deemed in compliance with the applicable requirements of the Kansas air quality program as of the date of permit issuance. This shield applies only to:

- applicable requirements included, and specifically identified in the permit; and
- applicable requirements that the KDHE has specifically identified in writing as not being applicable to the emissions unit or stationary sources and the determination or a concise summary thereof is included in the permit.

Nothing in this permit shall alter or affect:

- the liability of a permittee for any violation of an applicable requirement occurring prior to or at the time of issuance of this permit;
- U.S. EPA's ability to obtain information under Section 114 of the Clean Air Act
- the provisions of Section 303, Emergency orders, of the Clean Air Act, including the authority of the administrator of the U.S. EPA under that section or the air pollution emergency provisions of the Kansas air quality program regulations, K.A.R. 28-19-55 through 28-19-58; or
- the applicable requirements of the acid rain program, consistent with section 408(a) of the Act. [K.A.R. 28-19-512(b)]

XII. Testing, Monitoring, Recordkeeping, & Reporting

Testing, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with the terms and conditions of the permit are required.

In addition to any testing, monitoring, recordkeeping, or reporting requirement contained in Section VI. **Applicable Requirements**, monitoring and reporting may be required under the provisions of K.A.R. 28-19-12, Measurement of Emissions, or as required by any other provision of the federal Clean Air Act.

Records to support all monitoring and copies of all reports required by the permit must be maintained for a period of at least five years from the date of the activity. Summary reports of any routine, continuous, or periodic monitoring must continue to be submitted at six-month intervals for the duration of the permit. The reporting periods and due dates for these reports are identified in Section **XIV. G., Compliance Certification**. All instances of deviations from permit requirements, **including perceived opacity exceedances,** shall be clearly identified in the report. All reports shall be certified by a responsible official. [K.A.R. 28-19-512(a)(11)(A)]

Submission of quarterly or semi-annual reports required by any applicable requirement which duplicate the reporting required in the previous paragraph will satisfy the reporting requirements of the previous paragraph if noted on the submitted report. [K.A.R. 28-19-512(a)(9)]

Records of required monitoring shall include:

- the date, place, and time of sampling or measurement;
- the date(s) analyses were performed;
- the company or entity which performed the analyses;
- the analytical techniques or methods used;
- the results of the analyses;
- the operating conditions that existed at the time of sampling or measurement; and
- the retention of records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [K.A.R. 28-19-512(a)(10)]

XIII. Reporting of Deviations from Permit Terms

Unless a different time period is specified in this permit, deviations from the requirements of this permit shall be reported to the KDHE as follows:

- Deviations which result in emissions exceeding those allowed in this permit shall be reported the next business day following the discovery of the release, with follow-up written notice within five business days following discovery of the release. The report shall include the probable cause of such deviations and any corrective actions or preventive measures taken.
- Deviations which do not result in emissions exceeding those allowed in this permit shall be reported in writing within ten business days following discovery of the deviation.

Oral notifications may be made to the air program field staff at the Northeast District Office in Lawrence or to the KDHE central office in Topeka. Written notifications shall be made to the KDHE central office with a copy to the Northeast District Office. [K.A.R. 28-19-512(a)(11)]

XIV. General Provisions

A. K.A.R. 28-19-11, Exceptions Due to Breakdowns or Scheduled Maintenance

1. Abnormal operating conditions resulting from malfunction, breakdown, or necessary repairs to control or processing equipment and appurtenances which cause emissions in excess of the limitations specified at K.A.R. 28-19-30 through 28-19-32 and K.A.R. 28-19-650 shall not be deemed violations provided that:

    a. The person responsible for the operation of the emission source notifies the KDHE in writing of the occurrence and nature of such malfunctions, breakdown, or repairs within ten days of noted occurrence.

    b. The number of occurrences of such breakdowns is not deemed excessive by the KDHE and appropriate reasonable action is taken to initiate and complete any necessary repairs and place the equipment back in operation as quickly as possible.

2. Emissions in excess of the limitations specified at K.A.R. 28-19-30 through 28-19-32 and K.A.R. 28-19-650 resulting from scheduled maintenance of control equipment and appurtenances will be permitted only on the basis of prior approval by the KDHE and upon demonstration that such maintenance cannot be accomplished by maximum reasonable effort, including off-shift labor where required, during periods of shutdown of any related equipment.

3. Excessive contaminant emission from fuel burning equipment used for indirect heating purposes resulting from fuel or load changes, startup, soot blowing, cleaning of fires, and rapping of precipitators will not be deemed violations provided that they do not exceed a period or periods aggregating more than five (5) minutes during any consecutive one (1) hour period. Provided, however, that where the operator of such equipment can demonstrate to the satisfaction of the KDHE that any such specific operational procedures will require that the allowable time period for excessive emissions be extended beyond five (5) minutes during any one hour, the KDHE may authorize, upon request of the operator, an adjusted time schedule for permitting such excessive emissions. Such authorization shall require that visible emissions not exceed an opacity of 60 percent; and shall specify an appropriate time and daily frequency schedule for such excessive emissions.

B. K.A.R. 28-19-752a, Hazardous Air Pollutants; Limitations Applicable to Construction of New Major Sources or Reconstruction of Existing Major Sources

This regulation shall continue in effect for an emissions unit or stationary source until a standard has been promulgated which is applicable to such source pursuant to section 112(d) of the federal Clean Air Act.

This regulation shall apply whenever construction of a new major source or reconstruction of an existing major source of hazardous air pollutants is proposed.

C. **Permit Term and Renewal**

This permit has a term of five years unless otherwise stated in this permit. A complete application, as defined in K.A.R. 28-19-518, and any applicable fee must be submitted to the KDHE not less than six months and not more than 18 months prior to the expiration date. This operating permit shall not expire on the expiration date if a complete and timely application has been filed with the KDHE. [K.A.R. 28-19-512(a)(8) and K.A.R. 28-19-514]

D. **Severability**

The provisions of this permit are severable, and if any portion of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstance, and the remainder of this permit, shall not be affected thereby.
[K.A.R. 28-19-512(a)(13)]

E. **Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.
[K.A.R. 28-19-512(a)(14)(D)]

F. **Compliance**

The owner or operator shall comply with all conditions of the permit and shall continue to comply with applicable requirements with which the owner or operator is in compliance, in accordance with K.A.R. 28-19-511(b)(16)(C)(i). Any permit noncompliance shall constitute a violation of the Kansas Air Quality Act and shall be grounds for enforcement action, for permit revocation or amendment, or for denial of a permit renewal application. All permit terms and conditions are federally enforceable.

It shall not be a defense for a permittee in an enforcement action to contend that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

This permit may contain provisions which require that data from specific test methods, monitoring, or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Sec. 51.212; 40 CFR Sec.52.12; 40 CFR Sec. 60.11; 40 CFR Sec. 61.12; and incorporation of 40 CFR Sec. 52.33, that allow the use of any credible evidence to establish compliance with applicable requirements. At the issuance of this permit, the State of Kansas has incorporated these provisions in its air quality regulations K.A.R. 28-19-212(c) and (d), K.A.R. 28-19-350, K.A.R. 28-19-720 and K.A.R. 28-19-735. [K.A.R. 28-19-512(a)(14)]

G. **Compliance Certification**

The permittee shall annually submit to the Air Compliance and Enforcement Section of the KDHE, and a copy to the Air Permitting and Compliance Branch of the U.S. EPA, Region VII, a certification of compliance (Form CR-02, "Annual Certification"). **The due date of the certification will be July 31 of each year.**

Therefore, the semiannual summary reports required by Section **XII. Testing, Monitoring, Recordkeeping and Reporting** shall be submitted by the dates specified below for each subsequent reporting period:

- The report covering the period from July 1 to December 31 shall be submitted by January 31 of each year, and

- The report covering the period from January 1 to June 30 shall be submitted by July 31 of each year.

The certification shall include the permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the method or methods used for determining the compliance, currently and over the reporting period; and such other facts as the KDHE may require to determine the compliance status of the source. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate and complete.
[K.A.R. 28-19-512(a)(26) and K.A.R. 28-19-512(a)(27)]

H. Emergency

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency shall constitute an affirmative defense to an action brought for noncompliance with such technology-based emission limitation if the conditions of paragraph (3) below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or relevant evidence that:

    a. an emergency occurred and that the permittee can identify the cause or causes of the emergency;

    b. the permitted facility was at the time being properly operated;

    c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and

    d. the permittee submitted notice of the emergency, containing a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken, to the KDHE within two working days of the time when emission limitations were exceeded due to the emergency.

4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

5. These emergency provisions are in addition to any emergency or upset provisions contained in any applicable requirement. Whenever these emergency provisions conflict with the provisions of K.A.R. 28-19-11, these emergency provisions shall control.

[K.A.R. 28-19-512(d)]

I. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, representatives of the KDHE, including authorized contractors of the KDHE, shall be allowed by the permittee to:

1. enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this document;

2. have access to and copies of, at reasonable times, any records that must be kept under conditions of this document;

3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this document; and

4. as authorized by the Kansas Air Quality Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

[K.A.R. 28-19-512(a)(22)]

J. Permit Amendment, Modification, Reopening and Changes Not Requiring a Permit Action

1. The permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

2. The permitting authority will reopen and revise or revoke this permit as necessary to remedy deficiencies in the following circumstances:

   a. Additional requirements under the Clean Air Act become applicable to the source three or more years prior to the expiration date of this permit. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.

   b. It is determined by the KDHE that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

   c. It is determined by the KDHE that it is necessary to revise or revoke this permit in order to assure compliance with applicable requirements.

3. This document is subject to periodic review and amending as deemed necessary to fulfill the intent and purpose of the Kansas Air Quality Statutes and the Kansas Air Quality Regulations.

4. No permit revision shall be required under any approved economic incentives, pollution prevention incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

[K.A.R. 28-19-513]

K. Duty to Provide Information

Unless a different time frame is specified in this permit, the permittee shall furnish to the KDHE any information that the KDHE may request in writing within 60 days of the request, unless the KDHE specifies another time period. Submittal of confidential business information must be in accordance with the KDHE procedures. [K.A.R. 28-19-518(c) and K.A.R. 28-19-512(a)(14)(E)]

L. Duty to Supplement

The permittee, upon becoming aware that any relevant facts were omitted from or incorrect information was included in any submittal, shall promptly submit such supplementary facts or corrected information. [K.A.R. 28-19-518(e)]

M. Other Permits and Approvals; Applicability

1. A construction permit or approval must be obtained from the KDHE prior to commencing any construction or modification of equipment or processes which results in potential emission increases equal to or greater than the thresholds specified at K.A.R. 28-19-300.

2. This document does not relieve the permittee of the obligation to obtain any approvals, permits, licenses, or documents of sanction which may be required by other federal, state, or local government agencies.

[K.A.R. 28-19-512(a)(29)]

N. Submissions

All reports, notifications, information, and other correspondence (including submission of the Annual Certification Form CR-02) shall be submitted to:

Air Compliance and Enforcement Section
Bureau of Air
Kansas Department of Health and Environment
1000 SW Jackson, Suite 310
Topeka, Kansas 66612-1366
(785) 296-6422

A copy of each Annual Certification Form CR-02 shall be submitted to:

Kansas Compliance Officer
Air Permitting and Compliance Branch
U.S. EPA, Region VII
11201 Renner Boulevard
Lenexa, Kansas 66219

The Annual Certification shall be certified by a responsible official. This certification shall state that, based on the information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate and complete. This certification shall be submitted with original signatures. [K.A.R. 28-19-512(a)(21) and K.A.R. 28-19-512(a)(27)]

When specified in the permit, contact the local office at:

Northeast District Office
800 West 24th Street
Lawrence, Kansas 66046
(785) 842-4600

Permit Writer

Lynelle Ladd
Environmental Scientist
Air Permitting Section

June 25, 2015
Date Signed

LML:saw
c: NEDO
O- 8186

CAM PLAN

MGP Ingredients (MGPI) is proposing the following CAM plan for the packed bed scrubber S1402 which is part of EP 181.

I. Background

A. Emissions Unit

Description: Pre-Fermenter units
Identification: PREFERM
Facility: MGPI
Atchison, KS

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Air Emission Source Construction Permit dated *April 12, 2010 (modified on May 2, 2012, July 13, 2012, January 24, 2013, and April 1, 2015)*
Regulated Pollutant (PSEU): 95 percent reduction or ≤ 20 ppm
Monitoring requirements: Water flow rate, Pressure drop

C. Control Technology: Packed Bed Scrubber

II. Monitoring Approach

A. Indicator – See Table below for performance indicator information:

	Indicator No. 1	Indicator No. 2
I. Indicator	Water flow rate	Pressure drop
Measurement Approach	The water flow rate is measured with a vortex flow meter.	The pressure drop is measured with a differential pressure gauge.
II. Indicator Range	Flow meter instrumentation range is 4 to 261 gallons per minute. An excursion is defined as scrubber flow rate of less than 90% of the average flow rate in the most recently accepted performance test. The 2013 performance test result was 25 gallons per minute.	The pressure instrumentation range is 0 to 1000 inches water. An excursion is defined as greater than 115% of the average pressure drop demonstrated in the most recently accepted performance test. The 2013 performance test result was 10-12 inches water.
III. Performance Criteria		
A. Data Representativeness	The flow meter is installed in the scrubber water inlet line with a minimum accuracy of ±0.65% of reading.	The pressure differential gauge is installed across the scrubber with a minimal accuracy of ± 0.055% of reading.
B. Verification of Operational Status	NA	NA
C. Quality Assurance and Control Practices	Quarterly quality control checks on scrubber system.	Quarterly quality control checks on scrubber system.
D. Monitoring Frequency	Measured continuously	Measured continuously.
Data Collection Procedures	Recorded once every 2 hours.	Recorded once every 2 hours.
Averaging Period	Instantaneous values, not average values, are recorded every 2 hours.	Instantaneous values, not average values, are recorded every 2 hours.

III. Justification

A. Background

The emission unit included in this CAM Plan was determined to be subject to CAM since it meets the three CAM applicability criteria listed in 40 CFR 64. The control device associated with this CAM Plan is a scrubber. This CAM Plan details the compliance assurance monitoring that will be performed on the control device.

B. Rationale for Selection of Performance Indicator

The performance indicators selected for the scrubber were liquid flow and pressure drop. To achieve the required emissions reduction, a minimum flow rate must be supplied to absorb the given amount of VOC in the gas stream. The liquid to gas ratio (L/G) is a key operating parameter for the scrubber. If the L/G ratio decreases below the minimum, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur and the performance of the scrubber is reduced.

Pressure drop is also a key operating parameter for the scrubber. If solids build up and plug portions of the scrubber, this would increase in pressure drop as a result of static pressure and would reduce ventilation and prevent irrigation of other portions of the packed section. Excess emissions would eventually occur.

C. Rationale for Selection of Indicator Level

MGPI performed VOC stack testing on this unit in 2013. The stack test was conducted to determine the optimum liquid flow rate and pressure drop to maintain a destruction efficiency that was at or above the 95% DRE limit. The average VOC DRE during the test was 98.2%. MGPI selected a minimum operating flow rate of than 90% of the average flow rate established in the most recent performance test and pressure drop of greater 115% of the average pressure drop to be maintained by MGPI based on the test results.

If an excursion occurs, corrective action will be initiated within 8 hours to determine the action required to correct the situation. Documentation will be maintained of the corrective actions taken to return this unit to proper operation.

CAM PLAN

MGP Ingredients (MGPI) is proposing the following CAM plan for the packed bed scrubber S1567 which is part of EPs 182 and 183.

I. Background

D. Emissions Unit

Description: DC1510-Beer Still and Condensers in series, DC1520 Extractive Distillation and Condensers in Series, Mole Sieve Vacuum Drums and selected product tanks
Identification: DC1510, DC1520, T1593, T1573, T1582, T1583, T1586, T4324, T4325
Facility: MGPI Processing, Inc.
Atchison, KS

E. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Regulation No.: Air Emission Source Construction Permit dated *April 12, 2010 (modified on May 2, 2012, July 13, 2012, January 24, 2013, and April 1, 2015*
Regulated Pollutant (PSEU): 95 percent reduction or ≤ 20 ppm
Monitoring requirements: Water flow rate, Pressure drop

F. Control Technology: Packed Bed Scrubber

II. Monitoring Approach

B. Indicator – See Table below for performance indicator information:

	Indicator No. 1	Indicator No. 2
I. Indicator Measurement Approach	Water flow rate	Pressure drop
	The water flow rate is measured with float type flow meter.	The pressure drop is measured with a differential pressure gauge.
II. Indicator Range	Flow meter instrumentation range is 0.66 to 6.6 gallons per minute. An excursion is defined as scrubber flow rate of less than 90% of the average flow rate in the most recently accepted performance test. The 2013 performance test result was 6.5 gallons per minute.	The pressure instrumentation range is 0 to 1000 inches water. An excursion is defined as greater than 115% of the average pressure drop demonstrated in the most recently accepted performance test. The 2013 performance test result was 3-6 inches water.
III. Performance Criteria		
A. Data Representativeness	The float type flow meter is installed in the scrubber water inlet line with a minimum accuracy of ±2% of reading.	The pressure differential gauge is installed across the scrubber with a minimal accuracy of ± 0.055% of reading.
B. Verification of Operational Status	NA	NA
C. Quality Assurance and Control Practices	Quarterly quality control checks on scrubber system.	Quarterly quality control checks on scrubber system.
D. Monitoring Frequency	Measured continuously	Measured continuously.
Data Collection Procedures	Recorded once every 2 hours.	Recorded once every 2 hours.
Averaging Period	Instantaneous values, not average values, are recorded every 2 hours.	Instantaneous values, not average values, are recorded every 2 hours.

III. Justification

A. Background

The emission unit included in this CAM Plan was determined to be subject to CAM since it meets the three CAM applicability criteria listed in 40 CFR 64. The control device associated with this CAM Plan is a scrubber. This CAM Plan details the compliance assurance monitoring that will be performed on the control device.

D. Rationale for Selection of Performance Indicator

The performance indicators selected for the scrubber were liquid flow and pressure drop. To achieve the required emissions reduction, a minimum flow rate must be supplied to absorb the given amount of VOC in the gas stream. The liquid to gas ratio (L/G) is a key operating parameter for the scrubber. If the L/G ratio decreases below the minimum, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur and the performance of the scrubber is reduced.

Pressure drop is also a key operating parameter for the scrubber. If solids build up and plug portions of the scrubber, this would increase in pressure drop as a result of static pressure and would reduce ventilation and prevent irrigation of other portions of the packed section. Excess emissions would eventually occur.

E. Rationale for Selection of Indicator Level

MGPI performed VOC stack testing on this unit in 2013. The stack test was conducted to determine the optimum liquid flow rate and pressure drop to maintain a destruction efficiency that was at or above the 95% DRE limit. The average VOC DRE during the test was 98.7%. MGPI selected a minimum operating flow rate of than 90% of the average flow rate established in the most recent performance test and pressure drop of greater 115% of the average pressure drop to be maintained by MGPI based on the test results.

If an excursion occurs, corrective action will be initiated within 8 hours to determine the action required to correct the situation. Documentation will be maintained of the corrective actions taken to return this unit to proper operation.

CAM PLAN

MGP Ingredients (MGPI) is proposing the following CAM plan for the packed bed scrubber S1480 which is part of EP 181.

I. Background

G. Emissions Unit

Description: Fermentation Process
Identification: CONTFERM
Facility: MGPI Processing, Inc.
Atchison, KS

H. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Regulation No.: Air Emission Source Construction Permit dated *April 12, 2010 (modified on May 2, 2012, July 13, 2012, January 24, 2013, and April 1, 2015*
Regulated Pollutant (PSEU): 95 percent reduction or ≤ 20 ppm
Monitoring requirements: Water flow rate, Pressure drop

I. Control Technology: Tray Scrubber

II. Monitoring Approach

C. Indicator – See Table below for performance indicator information:

	Indicator No. 1	Indicator No. 2
I. Indicator Measurement Approach	Water flow rate	Pressure drop
	The water flow rate is measured with float type flow meter.	The pressure drop is measured with a differential pressure gauge.
II. Indicator Range	Flow meter instrumentation range is 3.5 to 35 gallons per minute. An excursion is defined as scrubber flow rate of less than 90% of the average flow rate in the most recently accepted performance test. The 2013 performance test result was 30 gallons per minute.	The pressure instrumentation range is 0 to 1000 inches water. An excursion is defined as greater than 115% of the average pressure drop demonstrated in the most recently accepted performance test. The 2013 performance test result was 30-34 inches water.
III. Performance Criteria		
A. Data Representativeness	The float type flow meter is installed in the scrubber water inlet line with a minimum accuracy of ±2% of reading.	The pressure differential gauge is installed across the scrubber with a minimal accuracy of ± 0.055% of reading.
B. Verification of Operational Status	NA	NA
C. Quality Assurance and Control Practices	Quarterly quality control checks on scrubber system.	Quarterly quality control checks on scrubber system.
D. Monitoring Frequency	Measured continuously	Measured daily.
Data Collection Procedures	Recorded once every 2 hours.	Recorded once every 2 hours.
Averaging Period	Instantaneous values, not average values, are recorded every 2 hours.	Instantaneous values, not average values, are recorded every 2 hours.

III. Justification

A. Background
The emission unit included in this CAM Plan was determined to be subject to CAM since it meets the three CAM applicability criteria listed in 40 CFR 64. The control device associated with this CAM Plan is a scrubber. This CAM Plan details the compliance assurance monitoring that will be performed on the control device.

F. Rationale for Selection of Performance Indicator

The performance indicators selected for the scrubber were liquid flow and pressure drop. To achieve the required emissions reduction, a minimum flow rate must be supplied to absorb the given amount of VOC in the gas stream. The liquid to gas ratio (L/G) is a key operating parameter for the scrubber. If the L/G ratio decreases below the minimum, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur and the performance of the scrubber is reduced.

Pressure drop is also a key operating parameter for the scrubber. If solids build up and plug portions of the scrubber, this would increase in pressure drop as a result of static pressure and would reduce ventilation and prevent irrigation of other portions of the tray. Excess emissions would eventually occur.

G. Rationale for Selection of Indicator Level

MGPI performed VOC stack testing on this unit in 2013. The stack test was conducted to determine the optimum liquid flow rate and pressure drop to maintain a destruction efficiency that was at or above the 95% DRE limit. The average VOC DRE during the test was 98.1%. MGPI selected a minimum operating flow rate of than 90% of the average flow rate established in the most recent performance test and pressure drop of greater 115% of the average pressure drop to be maintained by MGPI based on the test results.

If an excursion occurs, corrective action will be initiated within 8 hours to determine the action required to correct the situation. Documentation will be maintained of the corrective actions taken to return this unit to proper operation.

STATEMENT OF BASIS

Bureau of Air
Kansas Department of Health and Environment
MGPI Processing, Inc.
Title V Operating Permit Renewal
Source ID: 0050002
O-8186
May 31, 2013 (Modified April 8, 2015)
June 25, 2015

This statement of basis sets forth the legal and factual basis for the proposed permit conditions, including references to the applicable statutory or regulatory provisions. Determinations were made based upon the application submitted, file review and reasonable inquiry.

I. Facility Description

MGPI Processing, Inc. (MGPI) produces alcohol, gluten, and starch, from various raw materials such as milo, corn, and wheat flour. Corn and milo are received for the processing and production of alcohol. The grain is stored in any one of 4 grain storage bins. From the bins, the grain is mixed, ground and hydrated, to form a mash. This mash is then cooked and fermented for the production of alcohol. The alcohol is extracted through a series of distillation columns, and later stored, in preparation for shipping. After removing the alcohol, the remaining portion is processed and dried as feed.

Wheat flour is utilized for its abundance of starch and protein (gluten). Flour is received and stored at MGPI's flour tanks and then sent to the starch and gluten processing plant, and hydrated to allow the separation to take place. After the two materials are divided, each goes through a series of processing steps, prior to being dried, stored, packaged and shipped.

Since the issuance of the last operating permit, there have been several modifications; including the removal and disabling of equipment associated with a grain elevator onsite With the removal of the flour mill, references to SIC Code 2041 and NAICS Code 311211 have been removed from the permit

Additionally, several amendments to Consent Agreement and Final Order (CAO) Case No. 04-E-0034 issued on January 11, 2006 have occurred during the last operating permit issuance. The CAO Case No. 04-E-0034 was terminated on May 30, 2012. Pertinent requirements from CAO Case No. 04-E-0034 are contained in the Air Construction Permit dated April 12, 2010 (Modified May 2, 2012, July 13, 2012, January 24, 2013, April 1, 2015).

On January 24, 2006, under the authority of 40 CFR 60.13(i), the U.S. EPA approved MGPI's request to use a NOx Continuous Emission Monitor with a span of 100 ppm rather than the 500 ppm required by 40 CFR Part 60, Subpart Db. This information has been incorporated into the requirements for Boiler # 8.

All changes including applicable construction permit requirements are reflected in the Class I Operating Permit renewal.

A. The following is a list of equipment installed since the last Title V Operating Permit issuance:

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
EU-SWISSCOMBI	DDGS DRYER	SV-SWISSCOMBI	Integral to dryer	Integral to dryer
EU-CENTRATE	Centrifuges and Stillage tanks	SV-S1702	CE-S1702	Scrubber
IA-702 BULKLOAD	Starch Loading to Rail or truck; closed pneumatic system	SV- BINVENTS	CE-BINVENTS	Fabric Filter
TK-T1587	Ethanol 2200 gal (Beverage Alcohol)	SV-1587	N/A	N/A
IA-TANK P&S AMMONIA	Protein/Starch/Ammonia Tank 889 gal.	N/A	N/A	N/A
IA-COOLTWR5200	Cooling Tower	N/A	N/A	N/A
IA-TKCORNOIL	35,000 gallon (132.5 m^3) corn oil tank.	N/A	N/A	N/A
IA-TKDEFSYRUP	500 gallon defatted syrup tank	N/A	N/A	N/A
IA-CFGSYRUP	Thin stillage centrifuge	N/A	N/A	N/A
IA-CORNOILLOAD	Corn oil liquid tanker truck and rail car load-out	N/A	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-4STARCHDRY (existing*)	#4 Starch Spray Dryer (existing*)	SV-4STARCHDRY (existing*) and SV-BGH 3441 (new)	#4 Starch Spray Dryer baghouse (existing*) and integral process baghouse for the #4 Starch Spray Dryer baghouse (new)	CE-4STARCHDRY (existing*) and CE-BGH 3441 (new)
EU-BACKUP GEN1 Formerly listed as an insignificant source	Cummins Model Number QSX15-G9, SN 79316999 755 BHP diesel fired compression ignition emergency engine, manufacture date June 2008	SV- BACKUP GEN1	NA	NA

*IA-4STARDRY is existing but SV-BGH 3441 was added as an integral process baghouse

B. The following is a list of equipment removed from service or disabled at the facility and no longer included in the Title V Operating Permit.

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-GROUNDDUST	Ground Dust	SV-GRDUSTBH	CE-GRDUSTBH	Fabric Filter
IA-TRRECMILL	Truck Dump - Receiving (Flour Mill)	SV-TRDUMPBH	CE-TRDUMPBH	Fabric Filter
EU-4ROTARYDRY	#4 Rotary Dryer	SV-4ROTDRYCYC	CE-4ROTDRYCYC	Cyclone
IA-5DRUMCON	#5 Drum Dryer Conveyance	SV-5DRUMCON	N/A	N/A
IA-5-7DRUMACM	#5-#7 Drum Dryer ACM	SV-5-7DRUMACM	N/A	N/A
IA-DISTBRANUL	Bran Unloading (Distillery)	IA-DISTBRANUL	N/A	N/A
IA-RAILREDIST	Railcar Receiving (Distillery)	SV-RAILREDIST	N/A	N/A
EU-5ROTARYDRY	#5 Rotary Dryer	SV-5ROTDRYCYC	CE-5ROTDRYCYC	Cyclone
IA-RAILFLOUR	Rail Loadout (Flour)	SV-RAILFLOUR	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-FLOURDUMP	Flour Tanks Dump Station	SV-FLOURBH	CE-FLOURBH	Fabric Filter
IA-RAILREMILL	Railcar Receiving (Flour Mill)	SV-RAILREMILL	N/A	N/A
IA-RAILBRAN	Rail Loadout (Bran)	SV-RAILBRAN	N/A	N/A
IA-RAILTRUCK	Truck Loadout (Bran)	SV-TRUCKBRAN	N/A	N/A
IA-NTRUCKUL	North truck dump – Grain receiving (Distillery)	SV- NTRUCKUL	N/A	N/A
IA-BIN2LOAD	Feed Loadout – Bin 2 (Distillery)	SV-BIN2LOAD	N/A	N/A
IA-BIN4LOAD	Feed Loadout – Bin 4 (Distillery)	SV-BIN4LOAD	N/A	N/A
IA-1GLUTENDRY	#1 Gluten Flash Dryer	SV-1GLUTENDRY	N/A	N/A
IA-1GLUTENCON	#1 Gluten Flash Dryer Conveyance	SV-1GLUTENCON	N/A	N/A
IA-703DRYER	#703 Gluten Spray Dryer	SV-703DRYER	N/A	N/A
IA-703ACM	#703 Gluten Spray Dryer ACM	SV-703ACM	N/A	N/A
IA-COOLTWR1	Drum Dryers Cooling Tower	SV-COOLTWR1	N/A	N/A
IA-1DRUMDRY	#1 Drum Dryer	SV-1DRUMDRY	N/A	N/A
IA-2DRUMDRY	#2 Drum Dryer	SV-2DRUMDRY	N/A	N/A
IA-3DRUMDRY	#3 Drum Dryer	SV-3DRUMDRY	N/A	N/A
IA-4DRUMDRY	#4 Drum Dryer	SV-4DRUMDRY	N/A	N/A
IA-5DRUMDRY	#5 Drum Dryer	SV-5DRUMDRY	N/A	N/A
IA-6DRUMDRY	#6 Drum Dryer	SV-6DRUMDRY	N/A	N/A
IA-7DRUMDRY	#7 Drum Dryer	SV-7DRUMDRY	N/A	N/A
IA-2STARCHDRY	#2 Starch Spray Dryer	SV-2STARCHDRY	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-1-2DRUMCON	#1 and #2 Drum Dryer Conveyance	SV-1-2DRUMCON	N/A	N/A
IA-3-4DRUMCON	#3 and #4 Drum Dryer Conveyance	SV-3-4DRUMCON	N/A	N/A
IA-6DRUMCON	#6 Drum Dryer Conveyance	SV-6DRUMCON	N/A	N/A
IA-7DRUMCON	#7 Drum Dryer Conveyance	SV-7DRUMCON	N/A	N/A
IA-1-4DRUMACM	#1-#4 Drum Dryer ACM	SV-1-4DRUMACM	N/A	N/A
IA-ROTBRANCON	Rotary Dryer Bran Conveyance	SV-ROTBRANCON	N/A	N/A
IA-ROTDUSTCON	Rotary Dryer Dust Conveyance	SV-ROTDUSTCON	N/A	N/A
TK-SODSULFATE	Sodium Sulfate 75,000 lbs	SV-SODSULFBH	CE-SODSULFBH	Fabric Filter
EU-GRELEVLOW	Grain Elevator, Lower (Handling & Concrete Storage Bins)	SV-ELEVLOWBH	CE-ELEVLOWBH	Fabric Filter
EU-GRELEVUP	Grain Elevator, Upper (Handling & Concrete Storage Bins)	SV-ELEVUPBH	CE-ELEVUPBH	Fabric Filter
EU-BRANTRANS	Bran Transfer	SV-BRANTRANBH	CE-BRANTRANBH	Fabric Filter
EU-FEEDCONV	Feed Conveyor	SV-FEEDBH	CE-FEEDBH	Fabric Filter
EU-BMILLPRE	B-Mill - PreCleaning & Handling	SV-BMILLPRE	N/A	N/A
EU-BMILL	B-Mill - Millhouse	SV-BMILL	N/A	N/A
EU-AMILLPRE	A-Mill - PreCleaning & Handling	SV-AMILLPREBH	CE-AMILLPREBH	Fabric Filter
EU-AMILL	A-Mill - Millhouse	SV-AMILLBH	CE-AMILLBH	Fabric Filter
EU-A2MILL	A2-Mill - Millhouse	SV-A2MILL	N/A	N/A
EU-FLOURMILL	Flour Mill Building	SV-FLOURMIBH	CE-FLOURMIBH	Fabric Filter

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
TK-GRAINSTORE	Grain 500,000 bushels	SV-GRAINSTORE	N/A	N/A
TK-BIN4G/F	Grain/Feed 815,196 bushels	SV-BIN4CYC	CE-BIN4CYC	Cyclone
TK-DCTANK	DC 108 gal	SV-DCTANKCYC	CE-DCTANKCYC	Cyclone
TK-BIN2G/F	Grain/Feed 153,230 bushels	SV-BIN2G/F	N/A	N/A
TK-BLEND1	Grain/Feed Blending 24,087 gal	SV-BLEND1	N/A	N/A
TK-BLEND2	Grain/Feed Blending 25,262 gal	SV-BLEND2	N/A	N/A
TK-BLEND3	Grain/Feed Blending 25,262 gal	SV-BLEND3	N/A	N/A
TK-BLEND4	Grain/Feed Blending 16,352 gal	SV-BLEND4	N/A	N/A
TK- 5-8OVERHD	Bulk Flour 2304 gal	SV-5-8OVERBH	CE- 5-8OVERBH	Fabric Filter
TK-BRANTK	Bran 36,984 gal	SV-BRANTKBH	CE-BRANTKBH	Fabric Filter
TK-1PRODUCT	Protein/Starch Product 41,292 gal	SV-1PRODUCTBH	CE-1PRODUCTBH	Fabric Filter
TK-2PRODUCT	Protein/Starch Product 41,292 gal	SV-2PRODUCTBH	CE-2PRODUCTBH	Fabric Filter
TK-3PRODUCT	Protein/Starch Product 41,292 gal	SV-3PRODUCTBH	CE-3PRODUCTBH	Fabric Filter
TK-4PRODUCT	Protein/Starch Product 41,292 gal	SV-4PRODUCTBH	CE-4PRODUCTBH	Fabric Filter
TK-5PRODUCT	Protein/Starch Product 41,292 gal	SV-5PRODUCTBH	CE-5PRODUCTBH	Fabric Filter
TK-6PRODUCT	Protein/Starch Product 41,292 gal	SV-6PRODUCTBH	CE-6PRODUCTBH	Fabric Filter

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
TK-7PRODUCT	Protein/Starch Product 45,232 gal	SV-7PRODUCTBH	CE-7PRODUCTBH	Fabric Filter
TK-8PRODUCT	Protein/Starch Product 17,953 gal	SV-8PRODUCTBH	CE-8PRODUCTBH	Fabric Filter
TK-ETOH1014	Ethanol 38,400 gal (Beverage Alcohol)	SV-ETOH1014	N/A	N/A
TK-ETOHRC30	Ethanol 47,963 gal (Beverage Alcohol)	SV-ETOHRC30	N/A	N/A
TK-ETOHW203	Ethanol 320 gal (Beverage Alcohol)	SV-ETOHW203	N/A	N/A
TK-ETOHRC24	Ethanol 258,160 (Beverage Alcohol)	SV-ETOHRC24	N/A	N/A
TK-ETOHRC25	Ethanol 258,160 (Beverage Alcohol)	SV-ETOHRC25	N/A	N/A
IA-WHOLEMILL	Millhouse Whole Dust	SV-MILLWHBH	CE-MILLWHBH	Fabric Filer
IA-MILLFINE	Millhouse Fine Dust	SV-MILLFINEBH	CE- MILLFINEBH	Fabric Filer
EU-COOLTWR2	Cooling Tower #2	SV-COOLTWR2	N/A	N/A
EU-COOLTWR3	Cooling Tower #3	SV-COOLTWR3	N/A	N/A
EU-COOLTWR4	Cooling Tower #4	SV-COOLTWR4	N/A	N/A
EU-COOLTWR5	Cooling Tower # 5	SV-COOLTWR5	N/A	N/A
IA-TANKGRAIN	Tank Loadout (Grain)	SV-TANKGRAIN	N/A	N/A
IA-RAILGRAIN	Rail Loadout (Grain)	SV-RAILGRAIN	N/A	N/A
IA-BOILERWASH	Boiler Room Parts Washer	SV-BOILERWASH	N/A	N/A
IA-FLOURWASH	Flour Mill Maintenance Parts Washer	SV-FLOURWASH	N/A	N/A
TK-WHOLEDUST	Whole Dust 15,993 gal	SV-WHDUSTBH	CE-WHDUSTBH	Fabric Filter
IA-3GLUTENSML	#3 Gluten Flash Dryer Small Blender	SV-3GLUTENSML	CE-3GLUTENSML	Baghouse

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-3GLUTENLRG	#3 Gluten Flash Dryer Large Blender	SV-3GLUTENLRG	CE-3GLUTENLRG	Baghouse
TK-EASTSCALE1	Feed 24,746 gal	SV-ESCALE1CYC SV-ESCALE2CYC	CE-ESCALE1CYC CE-ESCALE2CYC	(2)Cyclone
TK-WESTSCALE	Feed 20,407 gal	SV-WSCALECYC	CE-WSCALECYC	Cyclone

C. The following is a list of equipment that is existing but has been changed or modified:

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
TK-ACETIC3068	Acetic Anhydride Tank	Former SV-FS3 Current SV-FS4	Former CE-FS3 Current CE-FS4	Gas Scrubber
TK-ACETIC3069	Acetic Anhydride Tank	Former SV-FS3 Current SV-FS4	Former CE-FS3 Current CE-FS4	Gas Scrubber
Formerly TK-ETOH1035 Currently TK-T4335	Ethanol 118,000 gal (Beverage Alcohol)	Formerly SV-ETOH1035 Currently SV-ETOH4335	N/A	N/A
Formerly TK-ETOH1026 TK-T4326	Ethanol 434,000 gal (Beverage Alcohol)	Formerly SV-ETOH1026 Currently SV-ETOH4326	N/A	N/A
Formerly TK-MEOH Currently TK-MEOH1	Methyl Alcohol 4516 gal	SV-MEOH	N/A	N/A
Formerly TK-ETHYLACET Currently TK-MEOH2	Formerly Ethyl Acetate 7050 gal Currently Methyl Alcohol 7050 gal	Formerly SV-ETHYLACET Currently SV-MEOH2	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
Former TK-HCL3107 Current TK-H2SO4-	Former HCl Tank Current H_2SO_4 Tank H_2SO_4 6400 gal	Former SV-FS3 Current SV-FS4	Former CE-FS3 Current CE-FS4	Gas Scrubber
Formerly TK-1-4OVERHD Currently TK-1-5,7OVERHD	Bulk Flour 2304 gal	Formerly SV-1-4OVERBH Currently SV-1-5,7OVERBH	Formerly CE-1-4OVERBH Currently CE-1-5,7OVERBH	Fabric Filter
TK-WESTGROUND	Formerly Ground Grain 30,737 gal Currently Grain 30,737 bushels	SV-WESTGROUND	N/A	N/A
TK-EASTGROUND	Formerly Ground Grain 30,737 gal Correct to Ground Grain 30,737 bushels	SV-EASTGROUND	N/A	N/A
Fomerly TK-PROPOX3101 Currently TK-POBULK	Propylene Oxide 12,000 gal	SV-FS2	CE-FS2	Gas Scrubber
FomerlyTK-PROPOX3102 Currently TK-PODAY	Propylene Oxide 2000 gal	SV-FS2	CE-FS2	Gas Scrubber
FormerlyTK-H2SO43107 Currently TK-H2SO4	H_2SO_4 6400 gal	SV-FS4	CE-FS4	Gas Scrubber
Formerly TK-ACETIC3068 Currently TK-ACETICBULK	Acetic Anhydride 7000 gal	SV-FS4	CE-FS4	Gas Scrubber
Formerly TK-ACETIC3069 Currently TK-ACETICDAY	Acetic Anhydride 800 gal	SV-FS4	CE-FS4	Gas Scrubber

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
TK-WHOLEGRAIN	Formerly Whole Grain 20,721 gal Corrected to Whole Grain 20,721 bushels	SV-WHOLEGRAIN	N/A	N/A
Formerly TK-1593VACTK Currently TK-T1593	Ethanol, Vac Tank 200 gal	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-1560FEED Currently TK-T1560	Ethanol 5000 gal	Formerly SV-1560FEED Currently SV-T1560	N/A	N/A
Formerly TK-1562FUSEL Currently TK-T1562	Fusel Oil 1269 gal	Formerly SV-1562FUSEL Currently SV-T1562	N/A	N/A
Formerly TK-1573VACTK Currently TK-T1573	Ethanol 200 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-1581BLEND CurrentlyTK-T1581	Ethanol 1000 gal (Beverage Alcohol)	Formerly SV-1581BLEND Currently SV-T1581	N/A	N/A
Formerly TK-1582STILL Currently TK-T1582	Ethanol 4000 gal (Beverage Alcohol)-	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-1583STILL Currently TK-T1583	Ethanol 4000 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-1586STILL Currently TK-T1586	Ethanol 10,000 gal (Beverage Alcohol)	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-1587BLEND Currently TK-T1587	Ethanol 2200 gal (Beverage Alcohol)	Formerly SV-1587BLEND Currently SV-T1587	N/A	N/A
Formerly TK-RC36FUSEL CurrentlyTK-T4336	Fusel Oil 8225 gal	Formerly SV-RC36FUSEL Currently SV-T4336	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
Formerly TK-GAS1005 Currently TK4305	Gasoline (Denaturant) 12,000 gal	Formerly SV-GAS1005 Currently SV-T4305	N/A	N/A
Formerly TK-ETOH1034 Currently TK-T4334	Ethanol 219,000 gal (Beverage Alcohol)	Formerly SV-ETOH1034 Currently SV-T4334	N/A	N/A
Formerly TK-ETOH4335 Currently TK-T4335	Ethanol 118,000 gal (Beverage Alcohol)	Formerly SV-ETOH4335 Currently SV-T4335	N/A	N/A
Formerly TK-ETOH4326 CurrentlyTK-T4326	Ethanol 434,000 gal (Beverage Alcohol)	Formerly SV-ETOH4326 Currently SV-T4326	N/A	N/A
Formerly TK-ETOH1027 Currently TK-T4327	Ethanol 434,000 gal (Beverage Alcohol)	Formerly SV-ETOH1027 Currently SV-T4327	N/A	N/A
Formerly TK-ETOH1028 Currently TK-T4328	Ethanol 434,000 gal (Beverage Alcohol)	Formerly SV-ETOH1028 Currently SV-T4328	N/A	N/A
Formerly TK-ETOH1029 Currently TK-T4329	Ethanol 434,000 gal (Beverage Alcohol)	Formerly SV-ETOH1029 Currently SV-T4329	N/A	N/A
Formerly TK-ETOH1033 Currently TK-T4333	Ethanol 220,000 gal (Beverage Alcohol)	Formerly SV-ETOH1033 Currently SV-T4333	N/A	N/A
Formerly TK-ETOH4330 Currently TK-T4330	Ethanol 83,900 gal (Beverage Alcohol)	Formerly SV-S1480 Currently SV-T4330	N/A	N/A
Formerly TK-ETOH4331 Currently TK-T4331	Ethanol 83,900 gal (Beverage Alcohol)	Formerly SV-S1480 Currently SV-T4331	N/A	N/A
Formerly TK-ETOH4332 Currently TK-T4332	Ethanol 83,900 gal (Beverage Alcohol)	Formerly SV-S1480 Currently SV-T4332	N/A	N/A
Formerly TK-ETOH1015 Currently TK-T4315	Ethanol 11,376 gal (Beverage Alcohol)	Formerly SV-ETOH1015 Currently SV-T4315	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
Formerly TK-ETOH1016 Currently TK-T4316	Ethanol 11,376 gal (Beverage Alcohol)	Formerly SV-ETOH1016 Currently SV-T4316	N/A	N/A
Formerly TK-ETOH1017 Currently TK-T4317	Ethanol 11,750 gal (Beverage Alcohol)	Formerly SV-ETOH1017 Currently SV-T4317	N/A	N/A
Formerly TK-ETOH1018 Currently TK-T4318	Ethanol 11,500 gal (Beverage Alcohol)	Formerly SV-ETOH1018 Currently SV-T4318	N/A	N/A
Formerly TK-ETOH1019 Currently TK-T4319	Ethanol 21,300 gal (Beverage Alcohol)	Formerly SV-ETOH1019 Currently SV-T4319	N/A	N/A
Formerly TK-ETOH1020 Currently TK-T4320	Ethanol 21,300 gal (Beverage Alcohol)	Formerly SV-ETOH1020 Currently SV-T4320	N/A	N/A
Formerly TK-ETOH1021 Currently TK-T4321	Ethanol 11,750 gal (Beverage Alcohol)	Formerly SV-ETOH1021 Currently SV-T4321	N/A	N/A
Formerly TK-ETOH1022 Currently TK-T4322	Ethanol 6385 gal (Beverage Alcohol)	Formerly SV-ETOH1022 Currently SV-T4322	N/A	N/A
Formerly TK-ETOHW201 Currently TK-WT4201	Ethanol 11,000 gal (Beverage Alcohol)	Formerly SV-ETOHW201 Currently SV-WT4201	N/A	N/A
Formerly TK-ETOHW202 Currently TK-WT4202	Ethanol 12,000 gal (Beverage Alcohol)	Formerly SV-ETOHW202 Currently SV-WT4202	N/A	N/A
Formerly TK-ETOH31 Currently TK-T4131	Ethanol 84,801 gal (Beverage Alcohol)	Formerly SV-ETOH31 Currently SV-T4131	N/A	N/A
Formerly TK-ETOH32 Currently TK-T4132	Ethanol 47,962 gal (Beverage Alcohol)	Formerly SV-ETOH32 Currently SV-T4132	N/A	N/A
Formerly TK-ETOH4324 Currently TK-T4324	Ethanol 100,000 gal	SV-S1567	CE-S1567	Gas Scrubber

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
Formerly TK-ETOH4325 Currently TK-T4325	Ethanol 100,000 gal	SV-S1567	CE-S1567	Gas Scrubber
Formerly TK-HCL3106 Currently TK-HCLBULK	HCl 6400 gal	SV-FS3	CE-FS3	Gas Scrubber

D. The following is a list of insignificant activities not specifically included in the Title V Operating permit under the U.S. EPA permit streamlining guidance and current KDHE policy.

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
IA-SPACEHTR	Natural gas fired space heaters (30) - less than 500,000 Btu/hour	SV-SPACEHTR	N/A	N/A
IA-R&D	Research and Development	SV- R&D	N/A	N/A
IA-MAINWASH	Maintenance Shop Parts Washer	SV-MAINWASH	N/A	N/A
TK-MERCO2	Heated makeup tank for clean-out: caustic, bleach and K-foam	SV-MERCO2	N/A	N/A
IA-TKCORNOIL	35,000 gallon (132.5 m^3) corn oil tank.	N/A	N/A	N/A
IA-TKDEFSYRUP	500 gallon defatted syrup tank	N/A	N/A	N/A
IA-CFGSYRUP	Thin stillage centrifuge	N/A	N/A	N/A
TK-NEWDISPER1	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER1	N/A	N/A

Emission Source ID	Emission Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description
TK-NEWDISPER2	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER2	N/A	N/A
TK-NEWDISPER3	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER3	N/A	N/A
TK-NEWDISPER4	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER4	N/A	N/A
TK-NEWDISPER5	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER5	N/A	N/A
TK-NEWDISPER6	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER6	N/A	N/A
TK-NEWDISPER7	Protein/Starch/ Ammonia 889 gal	SV-NEWDISPER7	N/A	N/A
TK-OLDDISPER1	Protein/Starch/ Ammonia 650 gal	SV-OLDDISPER1	N/A	N/A
TK-OLDDISPER2	Protein/Starch/ Ammonia 650 gal	SV-OLDDISPER2	N/A	N/A
IA-CORNOILLOAD	Corn oil liquid tanker truck and rail car load-out	N/A	N/A	N/A
IA-COOLTWR6	Modified Starch Cooling Tower #6	SV-COOLTWR6	N/A	N/A
IA-COOLTWR7	Fermenter Cooling Tower #6	SV-COOLTWR7	N/A	N/A

II. Facility Emissions Summary

Pollutant	2013 Actual (tpy)*	PTE (tpy)
Volatile Organic Compounds (VOCs)	66	<100
Individual Hazardous Air Pollutants (HAPs) • Acetaldehyde	8.9	<10
Combined Hazardous Air Pollutants (HAPs)	14.3	< 25
Particulate Matter less than 10 Microns (PM_{10})	43	> 100
Carbon Monoxide (CO)	91	> 100
Nitrogen Oxides (NO_x)	47	>100
Sulfur Dioxide (SO_2)	18	>100
Carbon Dioxide equivalents (CO_2e) • Combustion Totals • Biogenic Totals	282,025 128,100	>100,000

*Actual emission data from 2013 Emission Inventory
** Based on 2008 data.

III. Potential Applicable Requirements

A. Permit wording has been updated to meet current standards.

B. Insignificant activities have been revised in accordance with U.S. EPA permit streamlining guidance and current KDHE policy.

C. Facility wide requirements including opacity monitoring have been revised in accordance with current KDHE policy.

D. The application submitted by the facility contained a version of a Class I Operating Permit that was never issued. Therefore, that portion of the application was ignored, and the previously issued Class I Operating Permits were used to verify requirements.

E. U.S. EPA letter to MGPI dated January 24, 2006 is incorporated into this Class I Operating Permit which included the following:

Approves the use of a Continuous Emission Monitoring System (CEMS) with a NOx span of 100 ppm.

F. Air Construction Response dated October 8, 2007 is incorporated into this Class I Operating Permit renewal, which included the following:

> One (1) feed truck loading system located on the north side of the feed bins. The new loading chute shall include a dead box as required by the Consent Agreement and Final Order of the Secretary (CAO), Section 23, 1 dated 1/11/06.

G. Air Construction Response dated March 2, 2010 is incorporated into this Class I Operating Permit renewal, which included the following:

> One (1) Marley Cooling Towers closed loop sixteen-cell forced draft cooling tower system, model number NC8312G13 with a total drift loss of no greater than 0.005% of the design flow rate.

H. Air Construction Response dated April 22, 2010 included the following:

> It approved the routing of the breathing and working losses from the vents of storage tanks T4330, T4331, and T4332 to scrubber CE-S1480. However the project was never fully operational. MGPI reported VOC emissions to KDHE in order to document that the tie-in of the tanks to the scrubber was not needed to keep the facility-wide VOC below 100 tons per year in the interim period when the Marley Cooling Tower project was being constructed.

I. Air Construction Response dated October 29, 2010 is incorporated into this Class I Operating Permit renewal, which included the following:

> One (1) ventilation duct connected to the existing wet cake conveyor and routed to the inlet of the Swiss Combi dryer combustion fan.

J. Air Construction Permit dated April 13, 2012 is incorporated into this Class I Operating Permit renewal, which included the following:

> One (1) vertical fixed roof storage tank with a maximum capacity of 75,000 gallons for storing whole slop/stillage from the EU-CENTRATE process. The new tank is designated as T1710 and vents to the Centrate scrubber, designated as CE- S1702.

K. Air Construction Approval dated June 4, 2012 is incorporated into this Class I Operating Permit renewal, which included the following:

1. One (1) 2,200 gallon storage tank for storing beverage alcohol designated as TK-1587BLEND.

2. Emissions from valves, flanges and piping are accounted as fugitive emissions.

L. Air Construction Permit dated April 12, 2010 (Modified May 2, 2012, July 13, 2012, January 24, 2013 and April 1, 2015), is incorporated into this Class I Operating Permit renewal, which included the following:

1. A facility-wide VOC cap of 99 tons per 12-month rolling average was imposed.

2. A facility-wide HAP cap of 25 tons per 12-month rolling average for combined HAPs and 9 tons per 12-month rolling average for each single HAP was imposed.

3. A new Swiss Combi (EU-SWISS-COMBI) was added and EU-4 and EU-5 rotary dryers were discontinued as of 10/01/06. The Swiss Combi has a Particulate Matter limit of 0.02 gr/dscf, a requirement on Carbon Monoxide to be reduced by 90% or meet the 100 ppm limit and is to be equipped with Low-NO_x burners with an emission limit equal to or less than 0.08 (lb/MMBtu.

4. Scrubber EU-CENTRATE installed to reduce VOC emissions by either 95% or no higher than 20 PPM.

5. Baghouse limiting emissions of PM to less than or equal to 0.01 grains/dscf at the unloading grain trucks was imposed on EU-TRREC DIST.

6. Fermenter cooling tower EU-COOL TWR7 was installed.

7. A NOx emission limit of 0.04 lbs/MMBtu was imposed on all three boilers, EU-BOILER6, EU-BOILER7 and EU-BOILER8.

8. Requires boilers, EU-BOILER6 and EU-BOILER7 to burn natural gas only.

9. Allows EU-BOILER8 to continue to fire natural gas and fusel oil.

10. A deadbox was installed to reduce the velocity of feed to EU-RAILFEEDLD and EU-TRUCKFEED.

11. Distillation scrubber installed to provide either 95% reduction of VOC emissions or emissions no higher than 20 PPM.

12. Requires Tanks TK-ETOH4324 and TK-ETOH4325 be equipped with a closed vent system and control device designed and operated to reduce inlet VOC emissions by 95 percent or greater.

13. Requires all ethanol trucks either be dedicated to non-fuel use or show proof of being washed prior to being used at the facility.

14. Requires all ethanol railcars to be dedicated as non-fuel use only.

15. Removes the VOC monitoring requirements for remaining cooling towers after others have been removed.

M. Air Construction Response dated October 25, 2012 is incorporated into this Class I Operating Permit renewal, which included the following insignificant activities:

1. One 35,000 gallon (132.5 m^3) corn oil tank.

2. One 500 gallon defatted syrup tank

3. One thin stillage centrifuge.

4. One corn oil liquid tanker truck and rail car load-out.

N. Air Construction Response dated February 11, 2013 is incorporated into this Class I Operating permit renewal, which included the following insignificant activity:

1. One (1) MAC Equipment Inc. Model 96 AVR14 Style III Filter, rated at greater than 99% capture and control efficiency, to be designated as CE-BGH 3441. The baghouse will be used to improve the quality of the wheat starch that was captured and accumulated by the baghouse (CE-4STARCHDRY) which controls emissions from the # 4 starch dryer (IA-4STARCHDRY). The wheat starch processed by CE-BGH 3441 will be transferred to the distillery process side of the facility.

O. 40 CFR Part 60 Subpart IIII (NSPS), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The source has a 755 bhp compression ignition engine that is subject to this requirement. The requirements of NSPS IIII have been incorporated in the Class I Operating Permit renewal.

P. 40 CFR Part 64 Compliance Assurance Monitoring (CAM). The source is subject to CAM requirements for the following units: EU-PREFERM, EU-CONTFERM, DC1510, DC1520, T1593, T1573, T1582, T1583, T1586, T4324, and T4325. The requirements of CAM have been incorporated in the Class I Operating Permit renewal.

Q. The final rule for 40 CFR Part 63, Subpart JJJJJJ - National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources became effective on March 21, 2011 and has an initial compliance date of March 21, 2014. Air Construction Permit dated April 12, 2010 (Modified May 2, 2012, July 13, 2012, and January 24, 2013) imposed a Federal Enforceable restriction to fire natural gas only on EU-BOILER6 and EU-BOILER7. EU-BOILER8 fires natural gas and fusel oil.

R. The facility is a major source of Greenhouse Gas (GHG) emissions for combustion sources. There are no applicable requirements, as defined by Title V purposes related to GHG emissions, at the time of this permit issuance.

ATTACHMENT 7

Bureau of Air
Curtis State Office Building
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Phone: 785-296-0243
Fax: 785-296-7455
JAhumada@kdheks.gov
www.kdheks.gov/bar

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

September 23, 2015

Source ID No: 0050002

Munim Hussain
MGP Ingredients, Inc.
P.O. Box 130
Atchison, KS 66002-0130

Subject: **Boiler 8 Relative Accuracy Test Audit**

Dear Mr. Hussain:

On September 10, 2015, the Kansas Department of Health and Environment (KDHE) received the Relative Accuracy Test Audit (RATA) report for the assessment of Boiler 8 conducted August 11, 2015 at the facility located in Atchison, Kansas. Emission testing was performed for MGP Ingredients, Inc. in order to demonstrate compliance with limits set in Kansas Air Construction Permit (C-10190). AirSource Technologies, Inc. of Shawnee, Kansas performed the testing. Javier Ahumada was the KDHE representative on site during the testing.

The RATA was conducted on the Boiler 8 oxides of nitrogen (NOx) CEMS. Testing was performed in accordance with 40 CFR Part 60, Appendix A, Methods 1, 3A and 7E as well as 40 CFR Part 60, Appendix B, Performance Specification 2. Boiler 8 appears to have demonstrated compliance with the NOx relative accuracy limit of 20% specified in PS 2 with an RA of 10.21%. The O_2 absolute difference was 0.85% and is below the limit of 1% difference specified in PS 3. The NSPS requires these RATAs to be completed annually which means no later than 12 months after the previous RATA. **The next RATAs must be completed no later than August 11, 2016.**

If you have any questions concerning the test results or analysis of this performance test or the compliance status of this facility please contact me at JAhumada@kdheks.gov or call at (785) 296-0243.

Sincerely,

Javier Ahumada
Environmental Specialist Supervisor
Compliance and Enforcement Section
Bureau of Air

c: NEDO

005-0002

RECEIVED
SEP 10 2015
BUREAU OF AIR

RELATIVE ACCUACY TEST AUDIT REPORT

Prepared for

MGP Ingredients, Inc.

Regarding testing of

Boiler No. 8

Located at

MGP Ingredients, Inc.
1300 Main
Atchison, KS 66002

Performed on

August 11, 2015

by

AIRSOURCE TECHNOLOGIES, INC.
20505 W. 67th St.
Shawnee, Kansas 66218
(913) 422-9001

Project No. 3632

1015 ✓

PREFACE

This report was prepared by AirSource Technologies, Inc., and contains the results of testing that was conducted on Boiler No. 8 at the MGP Ingredients, Inc. facility in Atchison, KS on August 11, 2015. To the best of our knowledge the data contained in this report are accurate and complete. Any questions concerning this report should be directed to Mr. Pete Liebl, Project Manager, or Mr. George Cobb, President.

AirSource Technologies, Inc.

Pete Liebl

Project Manager

Approved by:

George R. Cobb

George Cobb

President

August 20, 2015

TABLE OF CONTENTS

TABLE OF APPENDICES

SECTION 1 - INTRODUCTION

1.1 FACILITY OVERVIEW

The Midwest Grain Products, Inc. (MGPI) facility in Atchison produces a variety of finished and intermediate agricultural products including alcohol, starches, and glutens.

The facility is located 1300 Main St. in Atchison, Kansas.

The tested facility is owned and operated by MGPI.

1.2 CONTACT PERSON

The contact person for MGPI was Mr. Munim Hussain, Corporate Environmental Engineer.

1.3 TEST SITE INFORMATION

Midwest Grain Products, Inc. operates three boilers for general purpose steam use-Boiler Nos. 6, 7, and 8. A Relative Accuracy Test Audit (RATA) was conducted on Boiler No. 8.

1.4 PURPOSE OF TESTING

Testing was conducted to certify a continuous emission monitoring system (CEMS) monitoring oxides of nitrogen (NO_X) emissions from Boiler No. 8.

1.5 TESTING ORGANIZATION

Testing was performed by AirSource Technologies, Inc. (AirSource), 20505 W. 67th St., Shawnee, Kansas, 66218.

Mr. Pete Liebl, Project Manager, of AirSource conducted testing.

1.6 SUMMARY OF TESTING PERFORMED

Certification testing of the boiler CEMS consisted of determining the Relative Accuracy (RA) of Boiler No. 8's reported NO_X emissions in lb/MMBtu according to PS2. AirSource measured boiler NO_X emission rates in lb/MMBtu with dry basis NO_X and O_2 concentration analyzers and used a carbon-based fuel factor (F_d) of 8,710 dry standard cubic feet (dscf) per MMBtu for natural gas to convert the emission gas concentrations to NO_X emission rates.

Twelve 21-minute RA test runs were conducted on the boiler emission stack breach on August 11, 2015.

SECTION 2 - SUMMARY OF RESULTS

Instrument identifications for the analyzers are listed in Table 2-1 below.

Table 2-1
Incinerator Analyzer Identifications

Source	Facility Analyzer Make	Analyzer Model Number	Analyzer Serial Number
Boiler 8	O_2 - Ametek	PMA100L	0801254
	NO_X - Thermo Environmental	Model 42i	0808528654

2.1 RELATIVE ACCURACY

Table 2-2 below summarizes the RATA results for the boiler analyzers. Complete results can be found in Appendix B, RATA Results. MGPI CEMS data and other process information is located in Appendix D, MGPI Boiler CEMS Data.

The boiler was operating at greater than 50% of normal operation during testing.

Table 2-2
Boiler No. 8 RATA Results

Run	Date	Time	NOx (lb/MMBtu)		
			Source	AirSource	Δ_I
1-1-1*	8/11/15	08:55-09:15	0.0305	0.0342	0.0038
1-1-2	8/11/15	09:16-09:36	0.0311	0.0348	0.0037
1-1-3*	8/11/15	09:37-09:57	0.0311	0.0351	0.0039
1-1-4	8/11/15	10:15-10:35	0.0320	0.0353	0.0033
1-1-5	8/11/15	10:36-10:56	0.0321	0.0358	0.0037
1-1-6*	8/11/15	10:57-11:17	0.0323	0.0362	0.0039
1-1-7	8/11/15	11:33-11:53	0.0319	0.0351	0.0032
1-1-8	8/11/15	11:54-12:14	0.0315	0.0348	0.0034
1-1-9	8/11/15	12:15-12:35	0.0311	0.0344	0.0033
1-1-10	8/11/15	12:50-13:10	0.0320	0.0336	0.0016
1-1-11	8/11/15	13:11-13:31	0.0321	0.0345	0.0024
1-1-12	8/11/15	13:32-13:52	0.0322	0.0348	0.0025
Average			0.0318	0.0348	0.0030
Standard Deviation					0.0007
Confidence Coefficient					0.0005
Relative Accuracy			Relative to Standard (0.04 lb/MMBtu)		8.89%
			Relative to Reference Method		**10.21%**
Relative Accuracy Criterion			Relative to Reference Method		10% of Std.
			Relative to Standard		20% of RM

* Test run excluded from RA calculation

11.14

2.2 POTENTIAL ERRORS IN TESTING

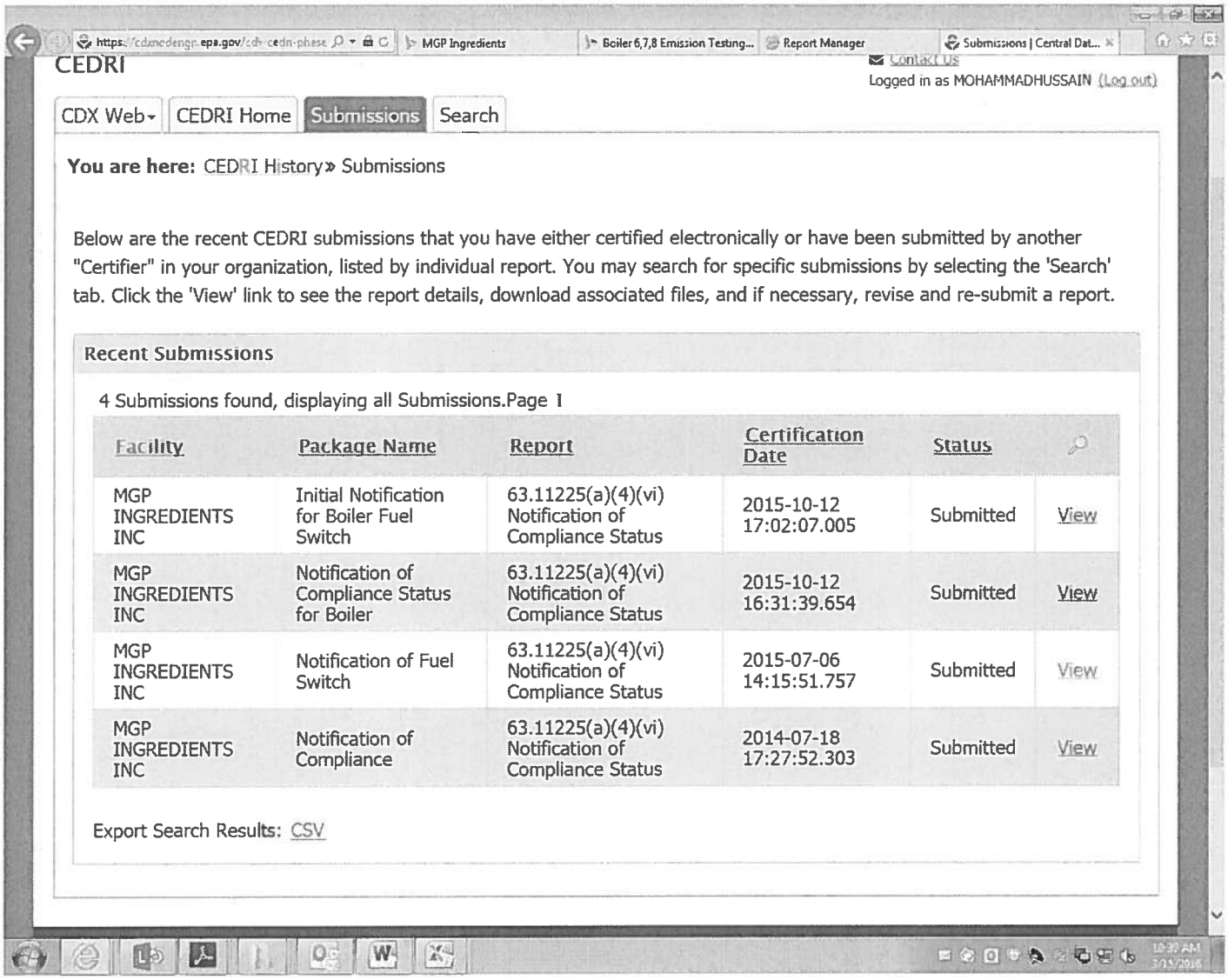
There were no apparent factors that would have caused errors in the test results.

2.3 EVALUATION OF PERFORMANCE

The CD test results for the Boiler 8 replacement NO_X analyzer were within the limit of 2.5% of span for 7 consecutive days as required by PS2.

The lb/MMBtu NO_X emissions reported by the Boiler No. 8 CEMS were within the 20% RA (relative to the reference method) criteria of PS2, after the installation of the replacement NO_X instrument.

ATTACHMENT 8


MGP Ingredients
Boiler 6,7,8 Emission Testing...
Report Manager
Submissions | Central Dat...
CEDRI
Contact Us
Logged in as MOHAMMADHUSSAIN (Log out)
CDX Web
CEDRI Home
Submissions
Search
You are here: CEDRI History» Submissions
Below are the recent CEDRI submissions that you have either certified electronically or have been submitted by another "Certifier" in your organization, listed by individual report. You may search for specific submissions by selecting the 'Search' tab. Click the 'View' link to see the report details, download associated files, and if necessary, revise and re-submit a report.
Recent Submissions
4 Submissions found, displaying all Submissions.Page 1
Facility
Package Name
Report
Certification Date
Status
MGP INGREDIENTS INC
Initial Notification for Boiler Fuel Switch
63.11225(a)(4)(vi) Notification of Compliance Status
2015-10-12 17:02:07.005
Submitted
View
MGP INGREDIENTS INC
Notification of Compliance Status for Boiler
63.11225(a)(4)(vi) Notification of Compliance Status
2015-10-12 16:31:39.654
Submitted
View
MGP INGREDIENTS INC
Notification of Fuel Switch
63.11225(a)(4)(vi) Notification of Compliance Status
2015-07-06 14:15:51.757
Submitted
View
MGP INGREDIENTS INC
Notification of Compliance
63.11225(a)(4)(vi) Notification of Compliance Status
2014-07-18 17:27:52.303
Submitted
View
Export Search Results: CSV

ATTACHMENT 9

MGP INGREDIENTS, INC.

Doc No. WI-004.E10.001
Rev. Date: 02/21/13
Rev. No.3

Feed and Grain Housekeeping Weekly Inspection

Procedure: observe each area for fugitive dust sources including: roads, equipment, area around equipment, material handling conveyors, and roof tops. Note any deficiencies. Notify the shift manager of situations that need cleanup, including the date and time. Re-inspect deficient areas within 48 hours.

	Date 2/19/16	Date 2/26/16	Date 3/2/16	Date 3/11/16	Date	Date
Area 1	OK Looks Great!	OK	OK	OK Looks Great	OK	OK
	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning
	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager
	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on
	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on
Area 2	OK	OK	OK	OK	OK	OK
	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning
	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager
	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on
	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on
Area 3	OK	OK	OK	OK	OK	OK
	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning	Needs Cleaning
	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager	Shift Manager
	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on	Contacted on
	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on	Re-inspection on
Inspector:	Drew Kuchinski	Drew Kuchinski	Drew Kuchinski	Drew Kuchinski		
Time:	2:40 PM	3:05 PM	2:20 PM	2:25pm		

Area 1 DC Tank, Scale load spots and surrounding area.
Area 2 Unloading areas on the south side of the bins, including the feed building.
Area 3 Unloading area on the north side of the bins including the blend tanks, mill house and conveyors.

ATTACHMENT 10

Title: **LDAR Monitoring Form – Results Summary**	
Document No.: WI-004.E05.003	Page 1 of 2
Effective Date:2/21/13	Revision No.: 0
See procedure for controlled form location	Facility: AT

Non-Beverage Processing Unit

Total Number of Valves	EPA Leaks	EPA Leak Percent
413	5	1.21%

Total Number of Pumps	EPA Leaks	EPA Leak Percent
10	0	0%

CD-20 Processing Unit

Total Number of Valves	EPA Leaks	EPA Leak Percent
113	1	0.89%

Total Number of Pumps	EPA Leaks	EPA Leak Percent
6	0	0%

Equipment ID	Date	Inspected by	Leak Rate (ppm)	Final Repair Date
PSV-1560-2	7/21/15	DCW Kuchinski	13000	10/29/15
PSV-1569-4	7/21/15	DCW Kuchinski	2586	10/20/15
LV-1565-1A	7/22/15	DCW Kuchinski	15000	7/28/15
MV-6158	7/22/15	DCW Kuchinski	44500	7/27/15
XV-1571-1	7/21/15	DCW Kuchinski	15000	10/14/15
MV-621	7/22/15	DCW Kuchinski	14000	8/7/15

Document Revision History

Revision No.	Effective Date:	Revised Section(s)
0	02/21/13	N/A (New)

MGPI Form – Internal Use Only

Title: **LDAR Monitoring Form – Weekly Pump Monitoring**	
Document No.: WI-004.E05.005	Page 1 of 2
Effective Date: 05/14/14	Revision No.: 2
Location of Controlled Document: R:\Atchison\EHS\SEMS\Public\Level 3 Procedures	Facility: AT

		Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
		1/8/16	1/14/16	1/22/16	1/29/16	2/5/16	2/10/16	2/19/16	2/25/16	3/2/16	3/11/16		
P1561	Recovery. Rectifier Reflux	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓		
P1565	High Proof Feed Pump	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓		
P1560	Low Proof Feed Pump	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓		
P1562	Fusel oil pump	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓		
P1564	Fusel oil pump to boiler	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	off ✓	On ✓	off ✓		
P1571	EtOH Product Pump	On ✓	On ✓	off ✓	off ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓		
P1572	Mol Sieve Regeneration. Pump	On ✓	On Leak	On Leak	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓		
P1573	Mol Sieve Vacuum Pump	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓	On ✓		
P4324	Off Quality Trans Pump	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓		
P4325	Beer Still Off Quality Loadout	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓	off ✓		

Notes: (LDAR Records)

	P1572 Repaired 1/27/16 (Reported 1/14/16)

ATTACHMENT 11

MGPI Form – Internal Use Only

Title: **LDAR Monitoring Form – TVA Calibration Log**	
Document No.: WI-005.E05.004	Page 1 of 1
Effective Date: 4/3/2014	Revision No.: 1
Controlled Document Location: MGP&ME	Facility: AT

Precision Calibration

Calibration is needed every three months or at the time of next use, whichever is longer. If calibration is not needed, then record previous values.

Date	Measurement (ppm)			Known Value	Difference (ppm)			Average Difference (ppm)	Precision
	1	2	3		1	2	3		
7/17/15	476	506	485	500 ppm	24	6	15	15	97%
				500 ppm					
				500 ppm					
				500 ppm					

Daily Calibration

The TVA must be calibrated before each day of use with zero-gas and 500 ppm methane gas cylinders. TVA, pump, and flame must be on for 30 minutes before calibration.

Date	30 Min Warm-Up?	Zero-Gas (ppm)	Exp Date	Methane (ppm)	Exp Date	Operator Initials
7/17/15	Yes	1.6	6/21/17	485	6/12/16	DK
7/21/15	Yes	1.98	6/21/17	502	6/12/16	DK
7/22/15	Yes	2.10	6/21/17	494	6/12/16	DK
7/23/15	Yes	1.99	6/21/17	498	6/12/16	DK

Document Revision History

Revision No.	Effective Date:	Revised Section(s)
1	4/3/14	Measured values in ppm added.
0	2/21/13	N/A (New)

ATTACHMENT 12

Soderberg
Polytechnic
Company, LLC

306 W. 7th Street # 401
Kansas City, MO 64105
(816) 221-9018
(888) 841-5857 (fax)

EMISSIONS TEST REPORT

Scrubbers S1702, S1480 & S1567
VOC Removal Efficiency &
Hazardous Air Pollutant Emissions

Prepared for

MGP Ingredients, Inc.
1300 Main St.
Atchison, Kansas

Performed on July 11th & August 23rd, 2013

Project #13019

Table 2-1
Summary of Results – S1702

Parameter	Unit	101	102	103	Average
Run Time on 7/11/2013	start end	09:02 10:02	10:45 11:45	12:20 13:20	
Outlet Temperature	°F	85	85	86	85
Outlet H_2O	%	4.07	4.07	4.65	4.26
Outlet O_2	%	20.81	20.84	20.83	20.83
Outlet CO_2	%	0.16	0.16	0.17	0.16
Outlet Velocity	ft/min	444	457	503	468
Outlet Flow Rate	acfm	155	160	176	163
	scfm	143	148	162	151
	dscfm	138	142	155	145
Outlet Acetaldehyde	ppm wet	4.53	4.66	4.33	4.51
	ppm dry	4.72	4.86	4.54	4.71
	lb/hr	0.0045	0.0047	0.0048	0.0047
	TPY	0.020	0.022	0.022	0.021
Outlet Acrolein	ppm wet	0.49	0.49	0.62	0.53
	ppm dry	0.51	0.51	0.65	0.56
	lb/hr	0.00061	0.00063	0.00088	0.00071
	TPY	0.0028	0.0029	0.0040	0.0032
Outlet Methanol	ppm wet	0.31	0.26	0.30	0.29
	ppm dry	0.32	0.27	0.31	0.30
	lb/hr	0.00024	0.00021	0.00026	0.00024
	TPY	0.0011	0.0009	0.0012	0.0011
Outlet Formaldehyde	ppm wet	0.29	0.32	0.31	0.31
	ppm dry	0.30	0.33	0.33	0.32
	lb/hr	0.0002	0.0002	0.0002	0.0002
	TPY	0.0009	0.0010	0.0011	0.0010
Outlet VOCs	ppm wet	11.0	10.9	10.7	10.9
	ppm dry	11.5	11.4	11.3	11.4
	lb/hr	0.0108	0.0111	0.0119	0.0113
Inlet H_2O	%	>90.0	>90.0	>90.0	>90.0
Inlet Flow Rate	scfm	>1,376	>1,417	>1,547	>1,446
Inlet VOCs	ppm wet	>920	>1,023	>994	>979
	ppm dry	>9,198	>10,225	>9,942	>9,789
	lb/hr	>08.7	>09.9	>10.5	>09.7
Removal Efficiency		>99.88	>99.89	>99.89	>99.88

Table 2-2
Summary of Results – S1480

Parameter	Unit	201	202	203	Average
Run Time on 7/11/2013	start end	18:00 19:00	19:35 20:35	21:05 22:05	
Outlet Temperature	°F	94	94	92	93
Outlet H_2O	%	5.54	5.54	5.21	5.43
Outlet O_2	%	0.00	0.00	0.00	0.00
Outlet CO_2	%	97.57	94.98	95.44	96.00
Outlet Velocity	ft/min	3,105	2,995	3,128	3,076
Outlet Flow Rate	acfm	4,068	3,925	4,099	4,031
	scfm	3,768	3,633	3,812	3,738
	dscfm	3,559	3,432	3,614	3,535
Outlet Acetaldehyde	ppm wet	13.7	14.3	12.6	13.5
	ppm dry	14.5	15.1	13.3	14.3
	lb/hr	0.35	0.36	0.33	0.35
	TPY	1.62	1.62	1.50	1.58
Outlet Acrolein	ppm wet	2.76	1.89	1.03	1.89
	ppm dry	2.92	2.00	1.09	2.00
	lb/hr	0.091	0.060	0.034	0.062
	TPY	0.41	0.27	0.16	0.28
Outlet Methanol	ppm wet	<1.01	<0.86	<0.75	<0.88
	ppm dry	<1.07	<0.91	<0.79	<0.93
	lb/hr	<0.021	<0.017	<0.015	<0.018
	TPY	<0.094	<0.077	<0.070	<0.080
Outlet Formaldehyde	ppm wet	<0.20	<0.18	<0.17	<0.18
	ppm dry	<0.21	<0.19	<0.17	<0.19
	lb/hr	<0.0034	<0.0030	<0.0029	<0.0031
	TPY	<0.0157	<0.0137	<0.0134	<0.0143
Outlet VOCs	ppm wet	125.0	113.1	104.0	114.0
	ppm dry	132.3	119.7	109.7	120.6
	lb/hr	3.23	2.82	2.72	2.92
Inlet H_2O	%	9.88	9.71	9.82	9.80
Inlet Flow Rate	scfm	3,949	3,801	4,007	3,919
Inlet VOCs	ppm wet	8,227	8,114	7,860	8,067
	ppm dry	9,129	8,986	8,715	8,943
	lb/hr	223.1	211.5	216.0	216.9
Removal Efficiency		98.55	98.67	98.74	98.65

Table 2-3
Summary of Results – S1567

Parameter	Unit	301	302	303	Average
Run Time on 8/23/2013	start end	11:10 12:10	12:55 13:55	14:30 15:30	
Outlet Temperature	°F	93	94	93	94
Outlet H_2O	%	5.56	5.53	5.59	5.56
Outlet O_2	%	1.91	2.96	2.10	2.32
Outlet CO_2	%	93.65	90.65	92.55	92.28
Outlet Velocity	ft/min	382	370	360	371
Outlet Flow Rate	acfm	78.1	75.6	73.7	75.8
	scfm	72.2	69.8	68.1	70.0
	dscfm	68.2	65.9	64.3	66.1
Outlet Acetaldehyde	ppm wet	191	187	217	199
	ppm dry	202	198	230	210
	lb/hr	0.095	0.090	0.101	0.095
	TPY	0.43	0.41	0.46	0.43
Outlet Acrolein	ppm wet	<15.34	<13.55	<13.53	<14.14
	ppm dry	<16.24	<14.34	<14.33	<14.97
	lb/hr	<0.0097	<0.0083	<0.0080	<0.0087
	TPY	<0.044	<0.038	<0.037	<0.039
Outlet Methanol	ppm wet	<2.07	<1.99	<2.27	<2.11
	ppm dry	<2.19	<2.10	<2.41	<2.23
	lb/hr	<0.00081	<0.00075	<0.00084	<0.00080
	TPY	<0.0037	<0.0034	<0.0038	<0.004
Outlet Formaldehyde	ppm wet	<0.26	<0.20	0.22	<0.22
	ppm dry	<0.27	<0.21	0.23	<0.24
	lb/hr	<0.00023	<0.00017	0.00022	<0.00021
	TPY	<0.0011	<0.0008	0.0010	<0.0009
Outlet VOCs	ppm wet	258.3	291.8	338.7	296.3
	ppm dry	273.5	308.9	358.8	313.7
	lb/hr	0.128	0.140	0.158	0.142
Inlet H_2O	%	56.40	57.80	58.95	57.72
Inlet Flow Rate	scfm	156.5	156.2	156.6	156.4
Inlet VOCs	ppm wet	>16,500	>16,500	>16,500	>16,500
	ppm dry	>37,844	>39,100	>40,195	>39,046
	lb/hr	>17.73	>17.68	>17.72	>17.71
Removal Efficiency		>99.28	>99.21	>99.11	>99.20

Soderberg
Polytechnic
Company, LLC

306 W. 7th Street # 401
Kansas City, MO 64105
(816) 221-9018
(888) 841-5857 (fax)

EMISSIONS TEST REPORT

Scrubber S1402 VOC Removal Efficiency & Hazardous Air Pollutant Emissions

Prepared for

MGP Ingredients, Inc.
1300 Main St.
Atchison, Kansas

Performed on October 25, 2013

Project #13023

Table 2-1

Parameter	Unit	Run 2	Run 3	Run 4	Average
Run Time on 10/25/2013	start end	15:40 16:44	17:10 18:14	18:38 19:41	
Inlet Temperature	°F	84	84	81	83
Inlet H_2O (saturation)	%	4.08	4.07	3.70	3.95
Inlet O_2	%	0.00	0.00	0.00	0.00
Inlet CO_2	%	92.21	92.48	92.87	92.52
Inlet Velocity	ft/min	1,713	1,706	1,697	1,705
Inlet Flow Rate	acfm	1,402	1,396	1,389	1,396
	scfm	1,356	1,348	1,347	1,350
	dscfm	1,301	1,293	1,297	1,297
Outlet H_2O (from FTIR)	%	11.59	12.49	13.26	12.45
Outlet Flow Rate	scfm	1,472	1,478	1,495	1,482
Outlet Acetaldehyde	ppm wet	12.47	11.99	11.37	11.9
	ppm dry	14.10	13.70	13.11	13.6
	lb/hr	0.126	0.122	0.117	0.121
	TPY	0.57	0.55	0.53	0.55
Outlet Acrolein	ppm wet	4.37	4.72	4.75	4.61
	ppm dry	4.94	5.39	5.48	5.27
	lb/hr	0.056	0.061	0.062	0.060
	TPY	0.26	0.28	0.28	0.27
Outlet Methanol	ppm wet	<1.30	<1.40	<1.37	<1.36
	ppm dry	<1.47	<1.59	<1.58	<1.55
	lb/hr	<0.010	<0.010	<0.010	<0.010
	TPY	<0.044	<0.047	<0.047	<0.046
Outlet Formaldehyde	ppm wet	<0.13	<0.11	<0.11	<0.18
	ppm dry	<0.14	<0.13	<0.13	<0.13
	lb/hr	<0.0009	<0.0008	<0.0008	<0.0008
	TPY	<0.0040	<0.0035	<0.0036	<0.0037
Outlet VOCs	ppm wet	110.9	119.3	114.1	114.8
	ppm dry	125.4	136.3	131.5	131.1
	lb/hr	1.12	1.21	1.17	1.17
Inlet VOCs	ppm wet	5,162	5,214	5,069	5,148
	ppm dry	5,582	5,595	5,426	5,535
	lb/hr	49.9	49.7	48.3	49.3
VOC Removal Efficiency	%	97.75	97.56	97.58	97.63

ATTACHMENT 13

Keystone LABORATORIES, INC.

ANALYTICAL REPORT

May 07, 2015

Work Order: 1D51726

Report To	Work Order Information
Munim Hussain	Date Received: 04/24/2015 9:45AM
MGP Ingredients, Inc. - Atchison	Collector: Hussain, Munim
1300 Main Street - PO Box 130	Phone: (913) 360-5444
Atchison, KS 66002	PO Number: PO#

Project : Fusel Oil Analysis

Project Number: MGP Ingredients, Atchison, KS 66002

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1D51726-01 DRAFT: Fusel Oil Tank				Matrix:Oil		Collected: 04/23/15 09:45	
Dichlorodifluoromethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Chloromethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Vinyl Chloride	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Bromomethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Chloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Trichlorofluoromethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Acrolein	<4.85 mg/kg	4.85	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,1-Dichloroethylene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Acetone	<24.3 mg/kg	24.3	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Methyl Iodide	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Carbon Disulfide	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Methylene Chloride	<24.3 mg/kg	24.3	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Acrylonitrile	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
trans-1,2-Dichloroethylene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Methyl-t-butyl Ether (MTBE)	<0.971 mg/kg	0.971	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Hexane	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,1-Dichloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Vinyl Acetate	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
cis-1,2-Dichloroethylene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
2-Butanone (MEK)	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Chloroform	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,1,1-Trichloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Carbon Tetrachloride	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Benzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,2-Dichloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Trichloroethylene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

MGP Ingredients, Inc. - Atchison
1300 Main Street - PO Box 130
Atchison, KS 66002

Work Order: 1D51726

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1D51726-01 DRAFT: Fusel Oil Tank				Matrix:Oil	Collected: 04/23/15 09:45		
1,2-Dichloropropane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
2-Chloroethyl Vinyl Ether	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Bromodichloromethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
cis-1,3-Dichloropropene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
4-Methyl-2-pentanone (MIBK)	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Toluene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
trans-1,3-Dichloropropene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Ethyl Methacrylate	<4.85 mg/kg	4.85	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,1,2-Trichloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Tetrachloroethylene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
2-Hexanone (MBK)	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Dibromochloromethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Chlorobenzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Ethylbenzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Xylenes, total	<0.971 mg/kg	0.971	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Styrene	**0.723 mg/kg**	**0.485**	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Bromoform	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,2,3-Trichloropropane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
trans-1,4-Dichloro-2-butene	<2.43 mg/kg	2.43	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,1,2,2-Tetrachloroethane	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,3-Dichlorobenzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,4-Dichlorobenzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
1,2-Dichlorobenzene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Naphthalene	<0.485 mg/kg	0.485	1YD1074	EPA 8260B	TDK	04/29/15 11:35	
Surrogate: Dibromofluoromethane	*101 %*			*83-120*	TDK	04/29/15 11:35	
Surrogate: 1,2-Dichloroethane-d4	*101 %*			*70-136*	TDK	04/29/15 11:35	
Surrogate: Toluene-d8	*96.9 %*			*84-115*	TDK	04/29/15 11:35	
Surrogate: 4-Bromofluorobenzene	*98.6 %*			*79-117*	TDK	04/29/15 11:35	
Total Halogens (TX)	**30 mg/kg**	**10**	1YE0216	EPA 9076	TRM	05/07/15 8:12	
Flash Point	**97 °F**		1YD1079	EPA 1010	JDK	04/29/15 15:35	
Chromium, total	<3.0 mg/kg	3.0	1YD1051	EPA 6010B	DRB	05/01/15 1:16	
Lead, total	<5.00 mg/kg	5.00	1YD1051	EPA 6010B	DRB	05/01/15 1:16	
Calorific Value	**12670 BTU/lb**	**100**	9D53005	ASTM D240-09	JNE	04/30/15 16:31	
Water	**17.6 %**	**0.00**	9D53006	ASTM D6304	JNE	04/30/15 17:24	
Nitrogen	**0.0214 %**		9D53004	ASTM D5291	JNE	04/30/15 16:40	
Viscosity @40 °C	**2.6 cSt**		9D53003	ASTM D445	JNE	04/30/15 13:20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

ATTACHMENT 14

MGP INGREDIENTS, INC.®

Waste Water Report

Totalizers

		Influent Daily Total Flow (Gal)	Digester Daily Total Feed Flow (Gal)
1/1/2016	Total	488,918	1,685,620
1/2/2016	Total	523,074	1,684,230
1/3/2016	Total	521,891	1,678,445
1/4/2016	Total	484,949	1,677,699
1/5/2016	Total	436,988	1,686,478
1/6/2016	Total	463,212	1,685,092
1/7/2016	Total	505,876	1,689,359
1/8/2016	Total	490,553	1,686,673
1/9/2016	Total	503,852	1,673,320
1/10/2016	Total	419,677	1,688,671
1/11/2016	Total	495,970	1,683,368
1/12/2016	Total	462,693	1,684,367
1/13/2016	Total	431,540	1,684,316
1/14/2016	Total	509,404	1,679,140
1/15/2016	Total	334,483	1,685,872
1/16/2016	Total	545,810	1,679,629
1/17/2016	Total	529,710	1,689,859
1/18/2016	Total	536,815	1,686,881
1/19/2016	Total	502,632	1,624,896
1/20/2016	Total	476,346	1,684,441
1/21/2016	Total	488,678	1,685,273
1/22/2016	Total	526,905	1,686,130
1/23/2016	Total	311,468	1,676,435
1/24/2016	Total	506,406	1,686,793
1/25/2016	Total	443,468	1,686,339
1/26/2016	Total	172,939	1,683,455
1/27/2016	Total	256,775	1,692,423
1/28/2016	Total	570,519	1,679,516
1/29/2016	Total	499,830	1,685,626
1/30/2016	Total	510,069	1,676,425

Biogas Daily Total Flow (SCF)
57,744
47,496
41,483
39,138
41,476
40,174
40,291
34,954
39,135
34,969
44,432
33,662
53,580
41,409
29,497
42,592
47,896
48,490
45,501
46,010
42,080
42,585
22,249
41,126
50,570
18,025
35,755
55,639
52,981
42,959

		Influent Daily Total Flow (Gal)	Digester Daily Total Feed Flow (Gal)
1/31/2016	Total	523,858	1,693,105

Biogas Daily Total Flow (SCF)
45,535

MGP INGREDIENTS, INC.®

Waste Water Report

Totalizers

		Influent Daily Total Flow (Gal)	Digester Daily Total Feed Flow (Gal)
2/1/2016	Total	513,523	1,680,303
2/2/2016	Total	453,817	1,683,090
2/3/2016	Total	499,302	1,684,291
2/4/2016	Total	517,687	1,687,466
2/5/2016	Total	508,526	1,689,032
2/6/2016	Total	506,558	1,684,442
2/7/2016	Total	540,131	1,690,511
2/8/2016	Total	555,998	1,684,772
2/9/2016	Total	525,286	1,684,503
2/10/2016	Total	518,960	1,682,329
2/11/2016	Total	477,802	1,683,308
2/12/2016	Total	394,672	1,681,343
2/13/2016	Total	451,630	1,688,393
2/14/2016	Total	506,372	1,684,422
2/15/2016	Total	490,193	1,686,284
2/16/2016	Total	469,563	1,684,903
2/17/2016	Total	404,818	1,683,064
2/18/2016	Total	497,748	1,686,122
2/19/2016	Total	483,368	1,687,355
2/20/2016	Total	522,100	1,690,648
2/21/2016	Total	503,627	1,667,423
2/22/2016	Total	498,686	1,680,379
2/23/2016	Total	433,235	1,676,620
2/24/2016	Total	499,154	1,687,697
2/25/2016	Total	491,296	1,685,233
2/26/2016	Total	507,230	1,684,508
2/27/2016	Total	520,954	1,686,875
2/28/2016	Total	520,695	1,683,522
2/29/2016	Total	506,488	1,684,562

Biogas Daily Total Flow (SCF)
42,984
28,326
49,860
57,444
42,052
52,039
43,422
44,621
45,552
42,134
37,593
28,907
39,307
42,780
41,015
33,214
27,853
34,280
32,911
45,209
40,410
40,972
32,998
36,473
37,953
40,030
44,202
42,922
45,487

MGP INGREDIENTS, INC.®

Waste Water Report

Totalizers

		Influent Daily Total Flow (Gal)	Digester Daily Total Feed Flow (Gal)
3/1/2016	Total	518,090	1,681,632
3/2/2016	Total	407,184	1,677,241
3/3/2016	Total	483,163	1,686,903
3/4/2016	Total	363,207	1,680,165
3/5/2016	Total	436,145	1,683,189
3/6/2016	Total	566,177	1,689,363
3/7/2016	Total	585,281	1,683,547
3/8/2016	Total	534,212	1,683,387
3/9/2016	Total	456,892	1,679,415
3/10/2016	Total	522,432	1,682,907
3/11/2016	Total	598,096	1,688,371
3/12/2016	Total	549,911	1,688,639
3/13/2016	Total	537,762	1,681,594
3/14/2016	Total	513,017	1,686,209
3/15/2016	Total	185,980	560,517

Biogas Daily Total Flow (SCF)
51,750
37,206
44,906
35,474
43,004
53,611
57,693
49,141
41,346
46,100
55,013
50,924
50,045
50,813
17,261

ATTACHMENT 15

DENATURANT PUMP HOURS

From 1/1/2014
To 12/31/2014

Pump	hours	gpm	gallons	min
Methanol Pump 1	46.17	20	55404	2770.2
Methanol Pump 2	46.17	20	55404	2770.2
TBA Pump	1.091228	19	1244	65.47368
Tote Pump	103.7368	19	118260	6224.211

Denaturant	gallons/yr
TBA	1244
Ehthyl Acetate	13071
IPA	84524
Methanol	110808
MIBK	5551
Propyl Acetate	4317
Heptane	983
Toluene	1773
Acetone	8041

ATTACHMENT 16

Bureau of Air
Curtis State Office Building
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Kansas

Phone: 785-296-0243
Fax: 785-296-7455
JAhumada@kdheks.gov
www.kdheks.gov/bar

Susan Mosier, MD, Acting Secretary | Department of Health & Environment | Sam Brownback, Governor

January 5, 2015

Source ID: 0050002

Munim Hussain
MGP Ingredients, Inc.
P.O. Box 130
Atchison, KS 66002-0130

Subject: **Swiss Combi Performance Testing**

Dear Mr. Hussain:

On November 17, 2014, the Kansas Department of Health and Environment (KDHE) received the performance test report for the assessment of the Swiss Combi dryer conducted September 23, 2014 at the facility located in Atchison, Kansas. Emission testing was performed for MGP Ingredients, Inc. in order to demonstrate compliance with limits set in Kansas Air Construction permit (C-10190). AirSource Technologies, Inc. of Shawnee, Kansas and Soderberg Polytechnic Company of Kansas City, MO performed the testing. Javier Ahumada and Adam Irvin were the KDHE representatives on site during a portion of the testing.

The Swiss Combi dryer (SCD) was tested after heat exchanger tube leaks were repaired for volatile organic compound (VOC) concentration, filterable and condensable particulate matter (PM/CPM), carbon monoxide (CO), hazardous air pollutants (HAPs) and oxides of nitrogen (NOx). Testing was performed in accordance with 40 CFR Part 60 & 63, Appendix A, Methods 1-5, 6, 7E, 25A, 202 and 320. The SCD appears to be in compliance with the limits specified in the permit and it appears that the acetaldehyde emissions are lower than before the repair, which means MGP will no longer exceed the 9 tpy individual HAP limit. MGP is currently working with KDHE through CAO 14-E-12 BOA to address the period where the acetaldehyde tpy emissions were above 9 tpy. Results are listed in the table below.

Unit	Test Date	Beer Feed Flow	VOC Limit	VOC	CO Limit	CO	NOx Limit	NOx
		WGPM	ppm	ppmvw	ppm	ppm	lb/mmBtu	lb/mmBtu
Swiss Combi Dryer	9/23/2014	700	10	5.6	100	70.6	0.08	0.021
			CH_3OH	C_2H_4O	C_2H_4O	HCHO	PM Limit	PM
			tpy	tpy	tpy	tpy	gr/dscf	gr/dscf
			<1.09	6.99	1.45	2.01	0.02	0.00075

If you have any questions concerning the test results or analysis of this performance test please contact me at JAhumada@kdheks.gov or call at (785) 296-0243. Questions regarding the compliance status of this facility should be directed to Russ Brichacek by email at RBrichac@kdheks.gov or by telephone (785) 296-1544.

Sincerely,

Javier Ahumada
Environmental Scientist
Compliance and Enforcement Section
Bureau of Air

c: NEDO

SOURCE EMISSIONS TEST REPORT

Prepared for

MGP Ingredients, Inc.

Regarding testing of the

Swiss Combi Rotary Grain Dryer

Located at

MGP Ingredients, Inc.
1300 Main
Atchison, KS 66002

Performed on

September 9, 2015

by

AIRSOURCE TECHNOLOGIES, INC.
20505 W. 67th St.
Shawnee, Kansas 66218
(913) 422-9001

Project No. 3638

SECTION 2 - SUMMARY OF RESULTS

Emissions measurement test results are summarized in Table 2-1 and Table 2-2 below. The VOC concentrations in Table 2-2 are expressed as an equivalent amount of propane. Complete results can be found in Appendix B, Calculated Results.

Table 2-1
SCD Particulate Emission Results

Parameter	Units	Run 112	Run 113	Run 114	Average
Date	—	09/09/15	09/09/15	09/09/15	—
Run Time Period	—	14:00-15:07	16:24-17:35	18:30-19:34	—
Sampling Time	min	60.00	60.00	60.00	—
Gas Stream					
Avg. Velocity Head (Δp)	in H_2O	0.690	0.764	0.666	0.707
Avg. Temperature	°F	287	287	284	286
Absolute Pressure	in Hg	28.94	28.86	28.84	28.88
Moisture Concentration	%V	56.42	57.12	57.49	57.01
O_2 Concentration, Dry	%V	5.67	5.74	5.90	5.77
CO_2 Concentration, Dry	%V	11.97	9.38	9.99	10.44
Avg. Velocity	ft/min	3,768	3,993	3,722	3,827
Flow Rate, Actual	acfm	49,847	52,823	49,234	50,635
Flow Rate, Wet	scfm	34,068	35,983	33,663	34,571
Flow Rate, Dry	dscfm	14,847	15,431	14,309	14,862
PM Concentration					
Filterable PM	gr/dscf	0.00360	0.000993	0.00222	0.00227
Condensible PM	gr/dscf	0.00760	0.00867	0.00802	0.00810
Total PM	gr/dscf	0.0112	0.00966	0.0102	0.0104
PM Emission Rate					
Filterable PM	lb/hr	0.459	0.131	0.273	0.288
Condensible PM	lb/hr	0.968	1.146	0.984	1.033
Total PM	lb/hr	1.43	1.28	1.26	1.32
Sample Volume	dscf	33.895	35.615	33.272	—
Avg. Isokinetic Variation	%	97.3	98.4	99.1	—

Table 2-2
SCD Gaseous Pollutant and HAPS Emission Results

Parameter	Units	Run 111[a]	Run 112[b]	Run 113	Average
Date	—	9/9/2015	09/09/15	09/09/15	—
Sampling Time Period	—	09:27-10:27	14:00-15:00	16:51-17:51	—
Flow Time Period	—	14:00-15:07	14:00-15:07	16:24-17:35	—
Gas Stream					
Avg. Velocity	ft/min	3,769	3,769	3,993	3,844
Flow Rate, Actual	acfm	49,862	49,862	52,826	50,850
Flow Rate, Wet	scfm	34,067	34,067	35,985	34,706
Flow Rate, Dry	dscfm	14,828	14,828	15,425	15,027
MEOH					
Concentration - Wet	ppmv	< 0.409	< 0.573	< 0.572	< 0.518
Emission Rate	lb/hr	< 0.0695	< 0.0974	< 0.1028	< 0.0899
	ton/yr	< 0.305	< 0.427	< 0.450	< 0.394
Acetaldehyde					
Concentration - Wet	ppmv	5.34	5.85	6.55	5.91
Emission Rate	lb/hr	1.25	1.37	1.62	1.41
	ton/yr	5.47	5.99	7.08	6.18
Acrolein					
Concentration - Wet	ppmv	0.097	0.098	0.106	0.100
Emission Rate	lb/hr	0.0287	0.0292	0.0332	0.0304
	ton/yr	0.126	0.128	0.145	0.133
Formaldehyde					
Concentration - Wet	ppmv	1.43	1.49	1.63	1.52
Emission Rate	lb/hr	0.229	0.237	0.274	0.247
	ton/yr	1.00	1.04	1.20	1.08
Instrument Log Time(s)	—	09:24-10:00	14:00-15:07	16:24-17:35	—
Gas Stream					
O_2 Concentration, Dry	%V	5.65	5.67	5.74	5.68
CO_2 Concentration, Dry	%V	11.15	11.97	9.38	10.83
Carbon Monoxide					
Concentration - Dry	ppmv	45.0	54.0	54.9	51.3
Oxides of Nitrogen					
Concentration - Dry	ppmv	18.4	19.1	17.9	18.5
Emission Rate (O_2)	lb/MMBtu	0.0262	0.0273	0.0257	0.0264
Total Hydrocarbons					
Concentration - Wet	ppmv	7.5	8.1	7.6	7.7

[a] HAPs emission rates based on volumetric flow rate from particulate train Test Run 212.
[b] HAPs results are an average of duplicate sample results.

2.1 POTENTIAL FACTORS AFFECTING TEST RESULTS

Because the first particulate test run was aborted, flow rate measurement results applied to the first HAPs test run were not from sampling conducted synchronously with HAPs measurements. This is not expected to significantly affect HAPs emission results.

ATTACHMENT 17

Power Generation

2013 EPA Tier 2 Exhaust Emission Compliance Statement 400DFEH Stationary Emergency 60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 2 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII when tested per ISO8178 D2.

Engine Manufacturer:	Cummins Inc
EPA Certificate Number:	DCEXL015.AAJ-014
Effective Date:	05/01/2012
Date Issued:	05/01/2012
EPA Engine Family (Cummins Emissions Family):	DCEXL015.AAJ (J103)

Engine Information:

Model:	QSX15 / QSX15-G9	Bore:	5.39 in. (137 mm)
Engine Nameplate HP:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	912 cu. in. (15 liters)
Aspiration:	Turbocharged and CAC	Compression Ratio:	17.0:1
Emission Control Device:	Electronic Control	Exhaust Stack Diameter:	8 in.

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions

	Grams per BHP-hr			Grams per kWm-hr		
	NOx + NMHC	CO	PM	NOx + NMHC	CO	PM
Test Results - Diesel Fuel (300-4000 ppm Sulfur)	4.3	0.4	0.10	5.7	0.6	0.13
EPA Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20
Test Results - CARB Diesel Fuel (<15 ppm Sulfur)	3.9	0.4	0.08	5.2	0.6	0.11
CARB Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20

The CARB emission values are based on CARB approved calculations for converting EPA (500 ppm) fuel to CARB (15 ppm) fuel.
Test Methods: EPA/CARB Nonroad emissions recorded per 40CFR89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A for Constant Speed Engines (ref. ISO8178-4, D2)
Diesel Fuel Specifications: Cetane Number: 40-48. Reference: ASTM D975 No. 2-D.
Reference Conditions: Air Inlet Temperature: 25°C (77°F), Fuel Inlet Temperature: 40°C (104°F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NOx correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to a maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results.
Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

ATTACHMENT 18

Backup Generator

Date	Total Runtime (hrs)
10/2/2015	129
11/2/2015	131
12/1/2015	132
1/4/2016	134
2/1/2016	136
3/1/2016	137

ATTACHMENT 19

CUSTOMER COPY

DATE 7-16-19

No. 62592

PREVIOUS SALES NO.	CODE	GALLONS-READING START	10ths
986	EE	0000	.0
987	EE	0447	.7
YOUR SALES NO.		GALLONS READING FINISH	

CONSUMER OIL & PROPANE, INC.

P.O. BOX 216
BENDENA, KS 66008
(785) 988-4459

conoco

1014 GASOLINE ALLEY
ATCHISON, KS 66002
(913) 367-1528

SOLD TO: MGA

ADDRESS PO# 4500028368

CASH	CHARGE	ROA	CONSUMPTION	RESALE	CUSTOMER NO.	PROJECT CONTRACT NO.
	✓				0717	

PRODUCT	GALS/QTY	PRICE	AMOUNT
Unleaded Gasoline FLAMMABLE LIQUID, 3, UN 1203			
Clear Ultra-low Sulfur Diesel Fuel COMBUSTIBLE LIQUID, 3, NA 1993 15-ppm sulfur ULSD			
Dyed Ultra-low Sulfur Diesel Fuel COMBUSTIBLE LIQUID, 3, NA 1993 15-ppm sulfur dyed ULSD. Non-road or tax exempt use only.	448	3.42 9	1536.19
Clear Ultra-low Sulfur Kerosene COMBUSTIBLE LIQUID, 3, UN1223 15-ppm sulfur kerosene.			
B-99 BIO DIESEL Blended to ASTM Specs			
Federal Excise Tax			
State Motor Fuel Tax			

Deduct ______________
if paid by ______________

Environmental Compliance Fee	
State Sales Tax	129.04
TOTAL	1665.23

☐ 15 PPM SULFUR (MAXIMUM) UNDYED ULTRA-LOW SULFUR DIESEL FUEL FOR USE IN ALL DIESEL FUEL FOR USE IN ALL DIESEL VEHICLES AND ENGINES.

☐ THIS PRODUCT IS DYED DIESEL FUEL NONTAXABLE USE ONLY, PENALTY FOR TAXABLE USE.

Delivered By

Payment Received By Date

Buyer acknowledges receipt of goods and agrees to the terms set forth by the Seller. A late **Finance Charge as** computed by Seller's current Terms and Conditions may be assessed against all late payments. 1.500% per month or an **Annual Rate** of 18% per year.

X

ATTACHMENT 20

Feb 2016

How to Use

Emission Source ID	Emission Source Description	Stack/Vent ID	VOC Emission Factors				HAPs Emission Factors		
EU-PREFERM	Fermentation Process (Pre-Fermenters Units)	SV-S1402	2012 (lb/hr)	0.821	Actual Hrs 696	0.40716	0.285708	Acrolein (lb/hr)	0.06	0.020881
								Formaldehyde (lb/hr)	0.0008	0.0002784
			2013 (lb/hr)	1.17			0.40716	Methanol (lb/hr)	0.01	0.00348
								Acetaldehyde (lb/hr)	0.121	0.042108
EU-CONTFERM	Fermentation Process (Continuous Fermentation Process)	SV-S1480	2012 (lb/hr)	4.39	Actual Hrs 696	1.01616	1.52772	Acrolein (lb/hr)	0.062	0.021576
								Formaldehyde (lb/hr)	0.0031	0.0016788
			2013 (lb/hr)	2.92			1.01616	Methanol (lb/hr)	0.018	0.006264
								Acetaldehyde (lb/hr)	0.35	0.1218
EU-CENTRATE	Centrifuges and Stillage tanks	SV-S1702	2012 (lb/hr)	0.0447	Actual Hrs 696	0.0039324	0.0155556	Acrolein (lb/hr)	0.00071	0.0002471
								Formaldehyde (lb/hr)	0.0002	0.0000696
			2013 (lb/hr)	0.0113			0.0039324	Methanol (lb/hr)	0.00024	8.352E-05
								Acetaldehyde (lb/hr)	0.0047	0.0016356
EU-DC1510	DC 1510 Beer Still and Condensers in series - E1510 (Beer Preheater), C1516 (Beer Still Condenser), and C1517 (Beer Still Vent Condenser) (existing)	SV-S1567	2012 (lb/hr)	0.2420	Actual Hrs 696	0.049416	0.084216	Acrolein (lb/hr)	0.0087	0.0030276
								Formaldehyde (lb/hr)	0.00021	7.308E-05
			2013 (lb/hr)	0.142			0.049416	Methanol (lb/hr)	0.00076	0.0002645
								Acetaldehyde (lb/hr)	0.095	0.03306
EU-DC1520	DC 1520 Extractive Distillation Column and Condensers C1522A & B in series with C1524 (existing) (Beverage Alcohol)	SV-S1567	2012 (lb/hr)	0.2420	Actual Hrs 696	0.049416	0.084216	Acrolein (lb/hr)	0.0087	0.0030276
								Formaldehyde (lb/hr)	0.00021	7.308E-05
			2013 (lb/hr)	0.142			0.049416	Methanol (lb/hr)	0.00076	0.0002645
								Acetaldehyde (lb/hr)	0.095	0.03306
EU-SWISSCOMBI	DDGS DRYER	SV-SWISSCOMBI	2012 (lb/hr)	1.6844	Actual Hrs 668	0.34402	0.5861712	Acrolein (lb/hr)	0.526	0.175684
								Formaldehyde (lb/hr)	0.094	0.031396
			2013 (lb/hr)	1.03			0.35844	Methanol (lb/hr)	0.166	0.055444
								Acetaldehyde (lb/hr)	0.613	0.204742
EU-BOILER6	Boiler #6 150 MM Btu natural gas 150	SV-BOILER6&7	(lb/MMCF)	5.50	Actual MMCF 47.33333333	0.13		Toluene (lb/MMCF)	0.0034	8.047E-05
								Hexane (lb/MMCF)	1.80	0.0426
								Formaldehyde (lb/MMCF)	0.0750	0.001775
								Benzene (lb/MMCF)	0.0021	0.0000497
								Lead (lb/MMCF)	0.0005	1.183E-05
								Manganese (lb/MMCF)	0.00038	8.993E-06
								Mercury (lb/MMCF)	0.00026	6.153E-06
								Nickel (lb/MMCF)	0.0021	0.0000497
								Arsenic (lb/MMCF)	0.0002	4.733E-06
								Beryllium (lb/MMCF)	0.000012	2.84E-07
								Cadmium (lb/MMCF)	0.0011	2.603E-05
								Chromium (lb/MMCF)	0.0014	3.313E-05
								Cobalt (lb/hr)	0.000084	1.988E-06
								Selenium (lb/MMCF)	0.000024	5.68E-07
								Naphthalene (lb/MMCF)	0.00061	1.444E-05
EU-BOILER7	Boiler #7 150 MM Btu natural gas 150	SV-BOILER6&7	(lb/MMCF)	5.50	Actual MMCF 32.08333333	0.09		Toluene (lb/MMCF)	0.0034	5.454E-05
								Hexane (lb/MMCF)	1.80	0.028875
								Formaldehyde (lb/MMCF)	0.0750	0.0012031
								Benzene (lb/MMCF)	0.0021	3.369E-05
								Lead (lb/MMCF)	0.0005	8.021E-06
								Manganese (lb/MMCF)	0.00038	6.096E-06
								Mercury (lb/MMCF)	0.00026	4.171E-06
								Nickel (lb/MMCF)	0.0021	3.369E-05
								Arsenic (lb/MMCF)	0.0002	3.208E-06
								Beryllium (lb/MMCF)	0.000012	1.925E-07
								Cadmium (lb/MMCF)	0.0011	1.765E-05
								Chromium (lb/MMCF)	0.0014	2.246E-05
								Cobalt (lb/hr)	0.000084	1.348E-06
								Selenium (lb/MMCF)	0.000024	3.85E-07
								Naphthalene (lb/MMCF)	0.00061	9.783E-06

Paste SAP Data Here

WIP Neutral Spirits Grain NSG 192 Proof	* 100086	3,083,735	WG
WIP Grade 15 Alcohol	* 100091	376,412	WG
ALC USP 200 Proof Alcohol	* 100202	554,225	WG
ALC Blended Regular TRG Gin	* 100327	6654	WG
ALC NSG Grade 12	* 100437	671,943	WG
ALC White Satin Gin	* 100533	0	WG
ALC Blended McCormick's TRG Gin	* 100555	13,170	WG
ALC Sazarac Gin	* 100585	44,474	WG
ALC Gilbey's Gin	* 100594	21442	WG
ALC NSG Grade 9	* 100717	1,225,089	WG
ALC NSG Grade 10 Beverage	* 100718	183,821	WG
ALC NSG Grade 11 Beverage	* 100719	0	WG
ALC Blended Special TRG Gin	* 100999	6503	WG
Gasoline, Natural	* 800214	8,994	GAL
Tertiary Butyl Alcohol (TBA)	* 800664	0	LB
Ethyl Acetate 99.9%	* 800739	0	LB
Isopropyl Alcohol 99% Technical Grade	* 800742	15,176	LB
Methanol	* 800743	0	GAL
Methyl Isobutyl Ketone (MIBK)	* 800744	2,211	LB
Diethyl Phthalate	* 800714	0	LB
Normal Propyl Acetate	* 800729	0	LB
Heptane	* 800741	1917	LB
Toluene	* 800745	2394	LB
Acetone	* 800746	8764	LB
Ethyl Polysilicate	* 800077	0	LB

VOC Total (Tons/month)	
Scrubbers	1.47666814
Swiss Combi	0.34402
Boiler 6	0.13
Boiler 7	0.09
Boiler 8	0.20
Tanks	2.352418227
Load out	1.858974349
WWTP-Flare	0.087909351
P&S Dryers	0.025912373
Condensers	0.049416
Total	6.615152033

Conversion Table

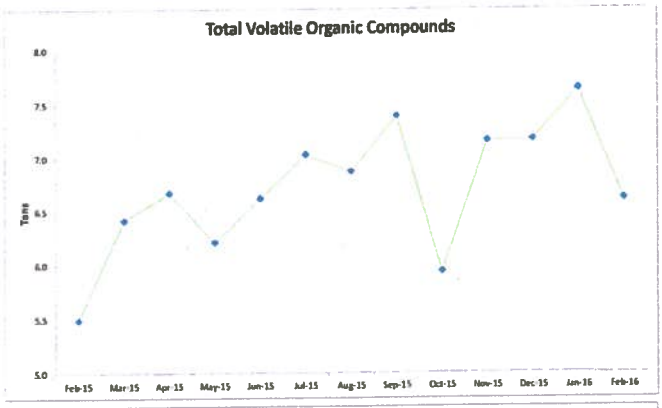
	Methanol	TBA	Gasoline	MIBK	Ethyl Acetate	IPA
lbs		0		2,211	0	15,176
gallons	0	0	8,994	330.988024	0	2331.182796
1000 gallons	0	0	8.994	0.33098802	0	2.331182796
	methyl alc	denaturant	gas 11005	denaturant	ethyl acetate	denaturant

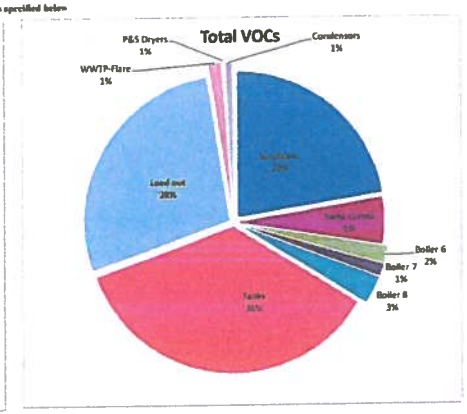
Pollutant	Total Emissions(Tons)
Acetaldeyde	0.436406
Acrolein	0.224442
Arsenic	1.53E-05
Benzene	0.0001603
Beryllium	9.16E-07
Cadmium	0.000084
Chromium	0.000202
Cobalt	6.41E-06
Formaldehyde	0.638694
Hexane	0.137400
HCl	0.000212
Lead	3.82E-05
Manganese	2.90E-05
Mercury	1.98E-05
Methanol	0.056056
MIBK	4.41E-06
Napthalene	4.66E-05
Nickel	0.0001603
Propylene Oxide	0.00449
Selenium	1.83E-06
Toluene	0.000259533
HAPs	0.755598
VOCs	0.615

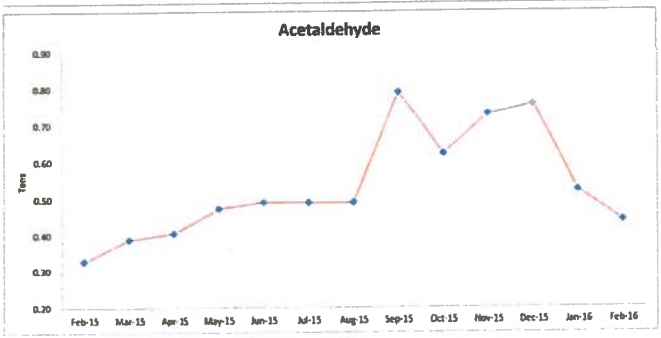
		Hours This Month
Days This Month	29	696
Some Combi Hours Down	28	668

Conversion Factor To Tons/Month		Mass factor
From lb/hr	0.3	0.0005

The conversion will calculate the tons for the current month unless the number of days is specified below







	IPA	Total Gin	Grade 12	NSG	Grade 9	Grade 10	Grade 11	200pf USP	Fuel	Fuel Oil
	15.176									
	2331 182796	92.243	671.943	3,083.735	1,225.089	183.621	0	554.225	376.412	
	2.331182796	92.243	671.943	3083.735	1225.089	183.621	0	554.225	376.412	0
							Half =	277.1125		
	denaturant	4316	4329	4330	4333	4327	4328	4334	4335	4336
										4312

ATTACHMENT 21

VOC Results Spreadsheet

Atchison Facility, Kansas

Month-Year (TONS)	Monthly VOC	Rolling Average VOC	Average Monthly Limit	Annual Production Limit	Monthly HAP	Rolling HAP	Annual HAP Limit	Acetaldehyde	Rolling Average Acetaldehyde	Annual HAP Limit
Jan-10	6.8	88.4	7.9	95.0	1.6	15.8	24.0	0.77	6.9	9.0
Feb-10	7.0	90.5	7.9	95.0	1.4	16.6	24.0	0.63	7.4	9.0
Mar-10	6.8	91.4	7.9	95.0	1.7	17.6	24.0	0.81	8.0	9.0
Apr-10	6.2	91.9	7.9	95.0	1.5	18.3	24.0	0.72	8.4	9.0
May-10	6.1	91.1	7.9	95.0	1.7	19.1	24.0	0.81	8.9	9.0
Jun-10	5.7	89.7	7.9	95.0	1.1	19.0	24.0	0.51	9.0	9.0
Jul-10	6.0	88.3	7.9	95.0	1.2	18.6	24.0	0.34	8.6	9.0
Aug-10	7.6	88.1	7.9	95.0	1.7	18.7	24.0	0.71	8.4	9.0
Sep-10	9.3	89.5	7.9	95.0	1.8	18.9	24.0	0.74	8.4	9.0
Oct-10	8.6	86.8	7.9	95.0	1.7	19.0	24.0	0.71	8.4	9.0
Nov-10	9.2	86.8	7.9	95.0	1.7	19.0	24.0	0.68	8.2	9.0
Dec-10	7.4	86.3	7.9	95.0	1.5	18.7	24.0	0.60	8.0	9.0
Jan-11	9.1	88.7	7.9	95.0	1.8	18.8	24.0	0.74	8.0	9.0
Feb-11	6.8	88.6	7.9	95.0	1.5	18.9	24.0	0.60	8.0	9.0
Mar-11	8.1	89.9	7.9	95.0	1.8	19.0	24.0	0.74	7.9	9.0
Apr-11	5.7	89.4	7.9	95.0	1.4	18.9	24.0	0.55	7.7	9.0
May-11	7.5	90.9	7.9	95.0	1.8	19.0	24.0	0.73	7.7	9.0
Jun-11	6.9	92.1	7.9	95.0	1.6	19.5	24.0	0.65	7.8	9.0
Jul-11	7.8	93.9	7.9	95.0	1.8	20.1	24.0	0.73	8.2	9.0
Aug-11	6.3	92.6	7.9	95.0	1.2	19.6	24.0	0.74	8.2	9.0
Sep-11	5.8	89.1	7.9	95.0	1.1	18.9	24.0	0.66	8.1	9.0
Oct-11	6.3	86.8	7.9	95.0	1.2	18.4	24.0	0.74	8.2	9.0
Nov-11	5.6	83.3	7.9	95.0	1.1	17.7	24.0	0.64	8.1	9.0
Dec-11	6.1	82.0	7.9	95.0	1.1	17.3	24.0	0.70	8.2	9.0
Jan-12	5.8	78.7	7.9	95.0	1.1	16.6	24.0	0.66	8.1	9.0
Feb-12	5.8	77.6	7.9	95.0	1.1	16.2	24.0	0.66	8.2	9.0
Mar-12	6.5	76.0	7.9	95.0	1.2	15.6	24.0	0.74	8.2	9.0
Apr-12	6.2	76.6	7.9	95.0	1.2	15.4	24.0	0.74	8.4	9.0
May-12	5.6	74.7	7.9	95.0	1.0	14.6	24.0	0.59	8.2	9.0

Jun-12	6.2	73.9	7.9	95.0	1.2	14.1	24.0	0.72	8.3	9.0
Jul-12	6.6	72.8	7.9	95.0	1.0	13.4	24.0	0.71	8.3	9.0
Aug-12	6.4	72.9	7.9	95.0	1.0	13.2	24.0	0.72	8.3	9.0
Sep-12	6.2	73.4	7.9	95.0	1.0	13.2	24.0	0.72	8.3	9.0
Oct-12	6.3	73.4	7.9	95.0	1.0	13.1	24.0	0.72	8.3	9.0
Nov-12	5.3	73.1	7.9	95.0	0.9	12.9	24.0	0.62	8.3	9.0
Dec-12	6.5	73.4	7.9	95.0	1.1	12.9	24.0	0.74	8.3	9.0
Jan-13	6.3	74.0	7.9	95.0	1.0	12.8	24.0	0.72	8.4	9.0
Feb-13	5.9	74.1	7.9	95.0	1.0	12.7	24.0	0.67	8.4	9.0
Mar-13	6.2	73.7	7.9	95.0	1.1	12.6	24.0	0.74	8.4	9.0
Apr-13	6.0	73.6	7.9	95.0	1.0	12.4	24.0	0.69	8.4	9.0
May-13	6.5	74.4	7.9	95.0	1.0	12.5	24.0	0.72	8.5	9.0
Jun-13	6.3	74.6	7.9	95.0	1.1	12.4	24.0	0.71	8.5	9.0
Jul-13	6.6	74.5	7.9	95.0	1.1	12.5	24.0	0.77	8.5	9.0
Aug-13	6.0	74.1	7.9	95.0	1.0	12.4	24.0	0.69	8.5	9.0
Sep-13	6.3	74.1	7.9	95.0	1.2	12.6	24.0	0.81	8.6	9.0
Oct-13	6.5	74.3	7.9	95.0	1.2	12.7	24.0	0.84	8.7	9.0
Nov-13	6.3	75.2	7.9	95.0	1.2	12.9	24.0	0.81	8.9	9.0
Dec-13	6.6	75.3	7.9	95.0	1.2	13.0	24.0	0.84	9.0	9.0
Jan-14	6.5	75.5	7.9	95.0	1.1	13.1	24.0	0.82	9.1	9.0
Feb-14	6.2	75.8	7.9	95.0	1.1	13.2	24.0	0.74	9.2	9.0
Mar-14	6.3	75.8	7.9	95.0	1.1	13.3	24.0	0.82	9.3	9.0
Apr-14	5.9	75.7	7.9	95.0	1.1	13.4	24.0	0.76	9.3	9.0
May-14	6.2	75.4	7.9	95.0	1.2	13.5	24.0	0.81	9.4	9.0
Jun-14	6.3	75.4	7.9	95.0	1.2	13.6	24.0	0.80	9.5	9.0
Jul-14	6.6	75.5	7.9	95.0	1.2	13.7	24.0	0.85	9.6	9.0
Aug-14	4.8	74.3	7.9	95.0	0.8	13.5	24.0	0.55	9.4	9.0
Sep-14	5.8	73.8	7.9	95.0	0.7	13.1	24.0	0.36	9.0	9.0
Oct-14	5.0	72.3	7.9	95.0	0.6	12.5	24.0	0.29	8.4	9.0
Nov-14	6.2	72.3	7.9	95.0	0.8	12.1	24.0	0.38	8.0	9.0
Dec-14	6.2	72.0	7.9	95.0	0.8	11.7	24.0	0.38	7.5	9.0
Jan-15	6.4	71.9	7.9	95.0	0.8	11.3	24.0	0.39	7.1	9.0
Feb-15	5.5	71.2	7.9	95.0	0.7	11.0	24.0	0.33	6.7	9.0
Mar-15	6.4	71.4	7.9	95.0	0.8	10.6	24.0	0.39	6.3	9.0
Apr-15	6.7	72.2	7.9	95.0	0.8	10.3	24.0	0.41	5.9	9.0
May-15	6.2	72.2	7.9	95.0	0.666	9.8	24.0	0.47	5.6	9.0

> fixed leak

		VOC 12 mo				HAP 12 MO			ACETALDEHYDE 12 MO	
Jun-15	6.6	72.5	7.9	95.0	0.688	9.3	24.0	0.49	5.3	9.0
Jul-15	7.0	72.9	7.9	95.0	0.688	8.8	24.0	0.49	4.9	9.0
Aug-15	6.9	75.1	7.9	95.0	0.69	8.7	24.0	0.49	4.9	9.0
Sep-15	7.4	76.6	7.9	95.0	0.989	8.9	24.0	0.79	5.3	9.0
Oct-15	5.9	77.6	7.9	95.0	0.782	9.1	24.0	0.62	5.6	9.0
Nov-15	7.17	78.5	7.9	95.0	0.94	9.3	24.0	0.73	6.0	9.0
Dec-15	7.18	79.5	7.9	95.0	0.95	9.4	24.0	0.76	6.4	9.0
Jan-16	7.65	80.7	7.9	95.0	0.88	9.5	24.0	0.52	6.5	9.0
Feb-16	6.62	81.8	7.9	95.0	0.76	9.6	24.0	0.44	6.6	9.0
Mar-16			7.9	95.0			24.0			9.0
Apr-16			7.9	95.0			24.0			9.0

ATTACHMENT 22

MGP

QUALITATIVE OPACITY - DISTILLERY

Semi-Annual Data
Jan to June 2016

Doc No. WI-004.E06.01
Rev. Date: 07/10/15
Rev. No.3

Emission Source ID	Emissions Source Description	Stack/Vent ID	January	February	March	April	May	June
IA-RAILFEEDLD	Rail Feed Loadout	SV-RAILFEEDLD	Not in Use	Not in Use				
IA-TRUCKFEED	Truck Feed Loadout	SV-TRUCKFEED	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
IA-SCALELOAD1	Scale Tanks Loadout #1	SV-SCALELOAD1	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
IA-SCALELOAD2	Scale Tanks Loadout #2	SV-SCALELOAD2	Not in use	Not in use				
EU-TRRECDIST	Truck Dump - Receiving (Distillery)	SV-TRRECDIST	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-BIN5G/F	Grain/Feed 187,395 bushels	SV-BIN5G/F	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-BIN6G/F	Grain/Feed 187,395 bushels	SV-BIN6G/F	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-BIN7G/F	Grain/Feed 187,395 bushels	SV-BIN7G/F	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-BIN8G/F	Grain/Feed 118,417 bushels	SV-BIN8G/F	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-WHOLEGRAIN	Whole Grain 20,721 bushels	SV-WHOLEGRAIN	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-COOKERMIX	Cooker Mix 515 gal	SV-COOKERMIX	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				

IA-FEEDBUILD1	Feed Storage Building	SV-FEEDBUILD1	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
IA-FEEDBUILD2	Feed Storage Building	SV-FEEDBUILD2	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
IA-MILHOPPER1	Ground Grain Transfer Hopper #1 at Millhouse	SV-MILHOPPER1	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
IA-MILHOPPER2	Ground Grain Transfer Hopper #2 at Millhouse	SV-MILHOPPER2	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-EASTGROUND	Ground Grain 30,737 bushels	SV-EASTGROUND	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				
TK-WESTGROUND	Ground Grain 30,737 bushels	SV-WESTGROUND	01/12/2016 8:35 am normal	02/16/2016 8:15 am normal				

MGP

Semi-Annual Data
Jan to June 2016

Doc No. WI-004.E06.01
Rev. Date: 07/10/15
Rev. No.3

QUALITATIVE OPACITY - DISTILLERY

Emission Source ID	Emissions Source Description	Stack/Vent ID	January	February	March	April	May	June
TK-1BULKFLOUR	Bulk Flour 38,899 gal	SV-1BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-2BULKFLOUR	Bulk Flour 38,899 gal	SV-2BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3BULKFLOUR	Bulk Flour 38,899 gal	SV-3BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-4BULKFLOUR	Bulk Flour 38,899 gal	SV-4BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-5BULKFLOUR	Bulk Flour 41,292 gal	SV-5BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-6BULKFLOUR	Bulk Flour 41,292 gal	SV-6BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-7BULKFLOUR	Bulk Flour 41,292 gal	SV-7BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-8BULKFLOUR	Bulk Flour 41,292 gal	SV-8BULKBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-1-5,7OVERHD	Bulk Flour 2304 gal	SV-1-5,7OVERBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-1PACKER	Protein/Starch Product 3441 gal	SV-1PACKERBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-2PACKER	Protein/Starch Product 3441 gal	SV-2PACKERBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3PACKER	Protein/Starch Product 3441 gal	SV-3PACKERBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				

TK-AM701	Protein/Starch Product 11,221 gal	SV-AM701BH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-701P/S	Protein/Starch Product 16,083 gal	SV-701P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-702P/S	Protein/Starch Product 16,083 gal	SV-702P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-703P/S	Protein/Starch Product 16,083 gal	SV-703P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-704P/S	Protein/Starch Product 33,812 gal	SV-704P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-705P/S	Protein/Starch Product 33,812 gal	SV-705P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-706P/S	Protein/Starch Product 33,812 gal	SV-706P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-707P/S	Protein/Starch Product 33,812 gal	SV-707P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-708P/S	Protein/Starch Product 33,812 gal	SV-708P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-4PACKER	Protein/Starch Product 12,343 gal	SV-4PACKERBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3201P/S	Protein/Starch Product 16,083 gal	SV-3201P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3202P/S	Protein/Starch Product 16,083 gal	SV-3202P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3203P/S	Protein/Starch Product 16,083 gal	SV-3203P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				

TK-3204P/S	Protein/Starch Product 16,083 gal	SV-3204P/SBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3001P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3002P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3003P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3004P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3005P/S	Protein/Starch Product 68,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3205P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3206P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3207P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3208P/S	Protein/Starch Product 63,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3006P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3007P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-3008P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				

TK-3009P/S	Protein/Starch Product 143,000 lbs	SV-NEWTKBLDG	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-701DRYER	#701 Gluten Spray Dryer	SV-701DRYER	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-701ACM	#701 Gluten Spray Dryer ACM	SV-701ACM	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702DRYER	#702 Gluten Spray Dryer	SV-702DRYER	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702CON	#702 Gluten Spray Dryer Conveyance	SV-702CON	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702VAC	#702 Gluten Spray Dryer	SV-702VAC	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702ACM	#702 Gluten Spray Dryer ACM	SV-702ACM	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702DUMP	#702 Gluten Spray Dryer Dump Station	SV-702DUMPFIL	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702 BULKLOAD	Loading starch or protein into truck, closed pneumatic	SV- BINVENTS						
IA-1BULKLOAD	#1 Bulk Loadout	SV-1BULKLOAD	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-2BULKLOAD	#2 Bulk Loadout	SV-2BULKLOAD	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-PACKERVAC	Packer Vacuum System	SV-PACKVACBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-CLEANSYS	Cleaning System	SV-CLEANSYSBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-PALLETVAC	Palletizing Vacuum System	SV-PALLETBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-BLENDDUMP	Blending Dump Station	SV-BLENDDUBH	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				

TK-NORTHHOLD	Starch 25,000 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-SOUTHHOLD	Starch 25,000 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-15STARCH	Starch 5700 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-16STARCH	Starch 5700 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-17STARCH	Starch 5700 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-EASTHOLD	Starch 25,000 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-8DRUMDRY	#8 Drum Dryer	SV-8DRUMDRY	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-9DRUMDRY	#9 Drum Dryer	SV-9DRUMDRY	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-10DRUMDRY	#10 Drum Dryer	SV-10DRUMDRY	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-P/SRAILDEL	Railcar Raw Material Delivery	SV-P/SRAILDEL	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-1STARCHCON	#1 Starch Flash Dryer Conveyance	SV-1STARCHCON	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-702 CON	702 Gluten Dryer Conveyance	SV-702CON	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-1BULKLOAD	#1 Bulk Loadout	SV-1BULKLOAD	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				

IA-2BULKLOAD	#2 Bulk Loadout	SV-2BULKLOAD	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-2GLUTENDRY	#2 Gluten Flash Dryer	SV-2GLUTENDRY	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-2GLUTENCON	#2 Gluten Flash Dryer Conveyance	SV-2GLUTENCON	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-HCLBULK	HCl 6400 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
TK-HCLDAY	HCl 800 gal	SV-FS3	01/13/2016 9:15 am normal	02/17/2016 8:05 am normal				
IA-R&DDRYER	Research and Development Dryer	SV-R&DDRYER	Not in Use	Not in Use				

MGP

Semi-Annual Data
Jan to June 2016

Doc No. WI-004.E06.01
Rev. Date: 07/10/15
Rev. No.3

QUALITATIVE OPACITY - DISTILLERY

Emission Source ID	Emissions Source Description	Stack/Vent ID	January	February	March	April	May	June
IA-STARCHRX1	Modified Starch Reactor #1	SV-FS1	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
IA-STARCHRX2	Modified Starch Reactor #2	SV-FS1	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
IA-STARCHRX3	Modified Starch Reactor #3	SV-FS1	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
IA-STARCHRX4	Modified Starch Reactor #4	SV-MODSTRXBH	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
TK-POBULK	Propylene Oxide 12,000 gal	SV-FS2	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
TK-PODAY	Propylene Oxide 2000 gal	SV-FS2	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
TK-H2SO4	H_2SO_4 6400 gal	SV-FS4	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
TK-ACETICBULK	Acetic Anhydride 7000 gal	SV-FS4	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				
TK-ACETICDAY	Acetic Anhydride 800 gal	SV-FS4	01/12/2016 1:35 pm normal	02/16/2016 1:15 pm normal				